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QUESTIONS AND CATEGORIES

Aristotle's doctrine of categories in the light of modern research

The topic "questions and categories" is suggested by the fact that, in the original list of categories given by Aristotle, the names of six out of ten categories are interrogative in form: *What is it?* (τί ἐστι), *How much?* (ποσόν), *Of what sort?* (ποιόν, *qualis*), *Towards what?* or *Relative to what?* (πρός τι), *Where?* (πού) and *When?* (ποτέ).[1] And in the case of the four categories whose names are not interrogative in form, it is easy to represent them as answers to questions: *What did he do?* for action (ποιεῖν); *What did he suffer?* for passion or being-acted-upon (πάσχειν); *What is he wearing?* or *How is he disposed?* for the category of having or *habitus* (ἔχειν); and *What is his position?* or *How is he situated?* for posture or situs (κεῖσθαι). Hence it is an old observation, made by William of Ockham and probably not for the first time, that Aristotle's classification of the categories is derived from a list of interrogative forms or questions asked in reference to a given subject – in reference to a man, for example, or some other individual substance. As Ockham says, every uncombined term (i.e. every uncombined word or concept) "by which one can answer a question posed concerning a substance is in some category. ... But other uncombined terms are not in any category."[2] The categories of Aristotle do not represent a complete logical inventory, a classification of all terms or concepts represented in language. They do attempt to classify all the terms of a basic object language, where these terms are specified by the questions that can be asked or answered concerning an individual subject. Hence the number of categories will be determined by the number of fundamentally distinct questions that can be raised concerning such a subject. As has often been pointed out, the full list of ten given in the *Categories* and in *Topics* I.9 suggests that Aristotle must have taken a human being as his specimen subject, for only in this case would the two minor categories, Posture and Having (or Clothing) be natural topics of inquiry.[3]

There is, then, a factual connection between Aristotle's list of categories and the linguistic forms of question or inquiry. But what is the philosophical significance of this connection? Reflection on this matter may proceed along two quite distinct lines of thought, each of which could provide material for a study devoted to questions and categories. On the one hand, we might consider Aristotle's doctrine simply as an early example of the genre, and widen the concept of category to include modern theories of logical,

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conceptual, and grammatical categories. Our topic would then become: the connection between interrogative forms and categorial distinctions in general. On the other hand, we may keep our attention fixed on Aristotle's doctrine but generalize the remark about interrogative forms to include other grammatical or linguistic considerations. Our topic will then be: the significance of the connections between Aristotle's scheme of categories and certain facts of grammar, including the grammar of questions in Greek. It is this second topic that I propose to study here: I will discuss Aristotle's theory, not category theories in general. But we must first look briefly at the more general topic, not only because of its intrinsic interest but also in order to detect the unconscious and almost inevitable influence which more recent doctrines of categories tend to exert upon our understanding of Aristotle.

Modern theories of categories are all formulated in the shadow of Kant. Kant was the first to break with the Aristotelian tradition in this matter and to introduce a fundamentally new theory of categories as "pure concepts of the understanding", as functions of judgment which provide the a priori and necessary conditions for any rational experience of the world. A "conceptual" view of categories, with their a priori, necessary status relativized to "our conceptual scheme", is still influential, particularly in Oxford. But most contemporary theories of logical and grammatical categories owe less to Kant than to Husserl, and to the doctrine of *Bedeutungskategorien* or semantic categories development in the second volume of *Logische Untersuchungen* (originally published in 1901; second edition in 1913). In a study entitled 'The distinction of independent and dependent meanings (*Bedeutungen*) and the idea of pure grammar', Husserl proposed the notion of a "purely logical grammar" (*reinlogische Grammatik*) in which the theory of semantic categories occupies a central place. According to Husserl, these formal categories of meaning, together with the laws of their combination, constitute the a priori foundations for logic and language in general. In his insistence upon attaching a priori and apodictic certainty to our recognition of these laws, Husserl remains faithful to Kant. But by explicitly recasting the categories in terms of grammar and linguistic meaning, he opens up the road to the future. (Kant himself had pointed to a connection between the study of categories as a priori concepts and the investigation of rules of grammar, but he had done nothing to explore this connection. See his remark in the second paragraph of the Appendix 'Of the System of the Categories', *Prolegomena to any Future Metaphysics* § 39.)

The basic contrast which Husserl lays down as a criterion for the discovery and definition of categories is the distinction between the *meaningful* and the

meaningless. Husserl is of course not the only thinker to introduce this distinction into the philosophical bloodstream of the twentieth century: one need only mention Russell's theory of types, which was first published in 1903. But Husserl's action is decisive in founding the doctrine of categories upon the criterion of menaingfulness. In his view, the laws of pure grammar will determine which combinations of meaning-units or of their corresponding linguistic expressions will form a meaningful whole (*Sinneseinheit*) rather than a meaningless jumble (*Unsinn, das Sinnlos*). Meaningfulness in this sense (like the "cognitive meaning" of later positivism) is the minimal condition for scientific thought and discourse; logical consistency or possible truth is for Husserl a further, additional condition. (A logical contradiction, he points out, is not a case of meaninglessness but a special case of the meaningful: namely, the necessarily false.) This minimal condition of semantic unity, insofar as it is not due to accidental peculiarities of particular languages, can be spelled out in "a priori laws" of meaning-combination and meaning-transformation.[4] The semantic categories in terms of which these laws must be formulated are defined as classes of meanings (or classes of the corresponding expressions) that are substitutible for one another in the same formal environment without loss of meaningfulness for the semantic whole within which they are substituted (Husserl, 1913 vol. II, part 1: 319). Husserl is thus probably the first thinker to give a systematic formulation to the notion of substitution-classes that is taken for granted in all modern logic (as the range of values for a variable) as well as in linguistics (as distributionally equivalent word-classes).

The typical formal environment representing a semantic whole within which partial substitution may occur is of course a sentence or a sentence frame. Hence, if we reinterpret the intuitively apprehended 'meanings' of Husserl's theory in terms of 'expressions' or linguistic symbols, we see that his criterion of meaningfulness directly prefigures the notions of well-formedness and grammaticality (in other words, sentencehood) in contemporary logic and linguistics. For his notion of an intra-categorial substitution as one that occurs without loss of meaningfulness becomes the modern notion of inter-substitutibility without loss of sentencehood or '*salva* grammaticality'. And Husserl's concept of a *Bedeutungskategorie* thus reappears as Carnap's notion of a kind of symbol or a 'genus of expressions', the notion which serves as a basis for the 'formation' and 'transformation rules' of logical syntax (Carnap, 1937: 167–70).

I cannot undertake to trace the historical continuity between Husserl and Carnap in any detail. A major link was certainly provided by the Polish school of logicians. And in this connection the great creative figure was Leśniewski.

It was Leśniewski who, under the direct inspiration of Husserl's *Logische Untersuchungen*, worked out the first systematic theory of 'semantic categories' for a formalized language. Leśniewski's system is particularly well designed to map the grammatical categories of natural languages, since its resources for the construction of formal categories are much richer and more flexible than the limited number of expression-types in Frege–Russell logic. Leśniewski's work remained largely unpublished, however, and his most explanatory manuscript was destroyed in the Warsaw uprising of 1944.[5] Hence the influence of Leśniewski's theory of semantic categories was exercised to a large extent by way of the application of similar ideas to natural language by Adjukiewicz, for example in his work on systactical connexity (Adjukiewicz, 1935). It was through Adjukiewicz and the other Polish logicians, including Tarski, that these ideas reached Carnap. (For this connection, see Carnap, 1937: 167.) And today, as a result of the work of Carnap, Tarski, Bar-Hillel, Zellig Harris, Noam Chomsky, Richard Montague and others, we have a rich development of formal syntax and formal semantics, within which a number of alternative systems of grammatical categories are defined with great precision.[6]

We also have a more informal notion of semantic category made popular by Gilbert Ryle's concept of a category mistake. Ryle's article 'Categories' is of special interest to us, since it deals directly with the interpretation of Aristotle's doctrine and also establishes a link between categories and questions.

Ryle was one of the few British philosophers to make a serious study of Husserl's work. (He has been known to say that he learned German by reading the *Logische Untersuchungen*.) But the philosophical motivation of his views on categories owes more to Wittgenstein and Carnap than to Husserl. Wittgenstein in the *Tractatus* had no explicit doctrine of logical categories, though like everyone else he made implicit use of the notion of a substitution class of symbols or expressions.[7] But it was Wittgenstein who introduced the twentieth century to the idea that "most of the propositions and questions to be found in philosophic works are not false but nonsensical" and "arise from our failure to understand the logic of our language" (*Tractatus* 4.003). "In order to avoid such errors we must make use of a sign-language ... that is governed by *logical* grammar – by logical syntax" (3.325). Carnap notoriously rejected Wittgenstein's view that the rules of this logical syntax cannot be coherently formulated, but he followed Wittgenstein with a vengeance in holding that "the sentences of metaphysics are pseudo-sentences which on logical analysis are proved to be either empty phrases or phrases which violate the rules of syntax" (Carnap, 1937: 8).

Ryle's article 'Categories' appeared in 1938, one year after the English edition of *The Logical Syntax of Language*. His debt to Carnap (or, perhaps, the direct convergence of their thinking on these matters) is acknowledged by a reference on precisely the point which concerns us here: the philosophical significance of Aristotle's method of classifying predicates or terms by reference to the kind of question they answer. Ryle explains and justifies this procedure by observing that a question may be analyzed as a sentence frame, where the interrogative word serves as a gap-sign to indicate the type of expression or sentence-factor that can fill the gap. And in this connection Ryle refers to Carnap's discussion of 'w... questions'.[8]

What concerns us is not so much Ryle's agreement with Carnap as the notion of logical category which he defines and which he attributes in principle to Aristotle: "To say that a given proposition-factor is of a certain category or type, is to say that its expression could complete certain sentence-frames without absurdity .... And by distinguishing varieties of sorts of questions, Aristotle is using a general method for exhibiting varieties of type of the factors which would be answers to those questions or complements to those gap-signs" (Ryle, 1938: 174f.). And a category-mistake occurs, of course, when an expression or sentence-factor of the wrong type is combined with an inappropriate sentence frame. The result is an absurdity.

Ryle's term *absurdity* echoes Husserl's notion of *Unsinn* or meaninglessness. But the philosophical motivation of his view is much more in the spirit of Carnap's doctrine of pseudo-sentences. As Ryle himself says (1938: 174), an example like *Saturday is in bed* violates no rule of grammar. And furthermore, as his later work shows, what Ryle has in view is not so much the patent absurdity of such sentences as the hidden absurdity of philosophical sentences that apparently make surface sense but which, upon analysis, turn out to be nonsensical in the way Wittgenstein had suggested. But Wittgenstein's charge that philosophical confusion arises from the failure to understand "the logic of our language" is now specified as the claim that such errors consist in a confusion of categories.

This would not be the appropriate occasion for a systematic critique of the notion of a category mistake. But it seems clear to me that the notion tends to blur the distinction between (1) obvious non-sentences which violate the rules of grammar in some straightforward way, like *A man and is*, to take one of Husserl's examples (1913: vol. II, part 1: 326), (2) problematic cases of odd, silly or perplexing sentences which seem to be grammatical but do not make obvious sense, like *Saturday is in bed* or *Colorless green ideas sleep furiously*, or *A kidney has an ant*, and (3) philosophical doctrines expressed in sentences which have no surface oddity about them but which, it is

claimed, rest upon illegitimate analogies or upon the conceptual confusion of treating radically unlike things as if they were somehow comparable. Like Husserl, modern syntax is concerned to discover the rules that explain why examples of type (1) are unacceptable as sentences. Some grammarians would also attempt to deal with examples like (2). It seems rather doubtful that any theory of grammar can adequately account for the oddity of most examples of this second type, but at least the problem is one which a linguist may reasonably regard as falling within his domain.[9] Not so, however, for the analogies which Ryle discovers underlying traditional dualism, and whose illegitimacy he denounces as the 'category mistake' of the Ghost in the Machine. The history of the notion of a category violation from Husserl to Ryle's 'Categories' (1938), and from 'Categories' to *The Concept of Mind* (1949), is a step-by-step shift from (1) to (2) to (3): from problems that obviously belong to grammar, to problems that dubiously belong to grammar, to problems that clearly do not belong to linguistics at all. This extension of the notion of 'category-mistake' has above all the result of providing philosophers with a new, more elegant and more flexible version of the neo-positivistic technique for denouncing one's opponent's doctrines as 'meaningless', 'senseless', or 'lacking in cognitive content'.

We may here take our leave of Ryle and other modern theories of categories, pausing only to notice the effect that familiarity with such theories must tend to have on contemporary interpretations of Aristotle's doctrine. One effect lies in the expectation that Aristotle's scheme was designed to classify linguistic expressions or, as Ryle puts it, sentence-factors. This view has been carefully refuted by Ackrill, and it need not be further considered here.[10] A more subtle and pervasive effect of the modern view of categories, however, is the tendency to think of Aristotle's doctrine as "setting limits of cognitive meaning", as concerned with the conditions of sense and absurdity like the semantic theories of Husserl, Carnap, or Ryle. Thus a recent survey of the general topic of categories begins with the following characterization, which is directly followed by an account of Aristotle's theory:

> Philosophical categories are classes, genera, or types supposed to mark necessary divisions within our conceptual scheme, divisions that we must recognize if we are to make literal sense in our discourse about the world. (Thompson, 1967: 46)

This view of categories leads the author to ask "what, according to Aristotle's theory, would be the sort of thing often called today a 'category-mistake' ", adding the specification that "with a genuine category mistake there is no literal meaning to restore" (Thompson, 1967: 47–48). It turns out, however,

that there seems to be at most one passage in Aristotle which may plausible be interpreted as using the scheme of the categories to expose a mistake that results in literal nonsense.[11]

Our brief survey of modern theories from Husserl to Ryle makes clear how natural it is to approach Aristotle's doctrine of categories with the assumption that it is designed to establish conditions of meaningful discourse and to draw the line between literal sense and nonsense. But there is in fact no evidence to support this assumption. It is true that, as we shall see, Aristotle's scheme of categories does serve to analyze the logical structure of what is said, and to distinguish this from the surface structure of the words in which it is said. But the scheme is not designed, nor is it used, to distinguish sentences from pseudo-sentences or sense from nonsense. It is distinctively modern to conceive of "categories" as part of a theory of meaning in this sense, and it is a pure illusion to project such a conception onto Aristotle's doctrine. The illusion is of course enhanced by the fact that Aristotle, in his concern to draw distinctions that are not reflected in the forms of language, does naturally speak of language, of sentences, of "meaning" or "signifying"; and does indeed take linguistic or grammatical facts into consideration. All the more reason, then, to bring into clear focus – and clearly reject – the illusion that his theory of categories is a theory of meaning in the modern sense, that his divisions represent grammatical or semantic categories based upon some criterion of meaningfulness, or that his doctrine of predication can be equated with the modern logico-linguistic notion of 'predicates'.

But if Aristotle's system of categories is neither a grammatical nor a linguistic theory, we must nevertheless face the question: why are his most important categories designated by the ordinary interrogative forms of colloquial Greek? One plausible answer to this question was proposed by Émile Benveniste in an influential article entitled 'Catégories de pensée et catégories de langue' (1958), which directly connects Aristotle's distinctions with linguistic peculiarities of Greek. Benveniste assumes that Aristotle's intention was to draw up a list of conceptual categories (*catégories de pensée*); he regards the scheme "as the inventory of properties which a Greek thinker judged to be predicable of an object, and consequently as the list of a priori concepts which, according to him, organize our experience" (Benveniste, 1958: 65). We are not concerned here with the Kantian turn that Benveniste gives to this notion of 'concept', but rather with his thesis as to the true source of the categorial distinctions. Benveniste claims that "these distinctions are originally linguistic categories (*catégories de langue*)" and that Aristotle, while attempting to discover universal and a priori concepts, "in fact simply turns up with some of the fundamental categories of the

language in which he thinks." The grouping of predicates corresponds "not to attributes discovered in things but to a classification emanating from the language itself" (1958: 66). Thus the first six categories all refer to nominal forms: 'substance' or 'whatness' (*οὐσία, τί ἐστι*) indicates the class of nouns; the paired terms 'quantity' (*ποσόν*) and 'quality' (*ποιόν*) represent two types of adjectives closely associated in Greek from the earliest texts (with their correlative forms *ὅσος-οἷος* and *τόσος-τοῖος*: cf., *ἀλλοῖος, ὁμοῖος*). These two categories "are thus clearly grounded in the system of forms of the language." Behind 'relation' (*πρός τι*) we find "another fundamental property of Greek adjectives, that of furnishing a comparative", as indicated in the form *μεῖζον* 'greater' which Aristotle himself cites as an example of this category. Again, 'place' (*πού*) and 'time' (*ποτέ*) are coupled by their formal symmetry (which reappears in *οὗ-ὅτε, τοῦ-τότε*) and represent a class of adverbs and locative case-forms. Thus the first six categories reflect nominal forms; by contrast, the last four represent verbal forms. 'Action' (*ποιεῖν*) and 'being-acted-on' (*πάσχειν*) obviously correspond to the active and the passive voice, as Aristotle's examples show: *τέμνειν* 'to cut', *καίειν* 'to burn', as opposed to *τέμνεσθαι* 'to be cut', *καίεσθαι* 'to be burnt'. What about the remaining two categories, *ἔχειν* 'having', or *habitus*, and *κεῖσθαι* 'posture', or *situs?* Benveniste points out that the two examples of *κεῖσθαι* are both verbs that have *middle* forms only (*ἀνάκειται* 'he is lying down', *κάθηται* 'he is sitting'), and that the middle voice "is equally irreducible to the active and to the passive", and denoted for a Greek thinker "a manner of being as characteristic as the two other voices" (Benveniste, 1958: 69). Finally, for *ἔχειν* 'to have' Benveniste proposes the sense of 'being in a certain state', as represented by the *perfect* forms of the verbs which Aristotle lists as examples: *ὑποδέδεται* 'he is shod', 'he has sandals on', *ὥπλισται* 'he is armed', 'he has armor on'.

Ingenious as is Benveniste's explanation, and reflecting as it does the special insight of a professional linguist, it is quite striking to discover that his hypothesis was anticipated in detail by F. A. Trendelenburg over a century ago. Trendelenburg's own aim was to defend Aristotle's scheme against Kant's and Hegel's charge that it was an unmethodical and random assortment of concepts by showing that it was in fact derived from a systematic grammatical analysis.[12] The grammatical derivation of the ten categories in Trendelenburg's view coincides almost exactly with that proposed by Benveniste: 'substance' from nouns or 'substantives', 'quantity' from numerical adjectives; 'quality' from descriptive adjectives; 'relation' from comparative adjectives. The fifth and sixth categories are assigned to adverbial forms: adverbs of place ('where') and of time ('when'). The last four categories are derived from verbal forms just as in Benveniste's view, using Aristotle's illustrative examples

as a guide. The only difference is that Trendelenburg connects 'posture' (κεῖσθαι) with intransitive verbs rather than with the middle voice; but this is roughly the same account given in terms of syntax rather than morphology.

When we ask what philosophical significance is to be assigned to these correlations, however, the views of Benveniste and Trendelenburg diverge sharply. The modern linguist believes that Aristotle was unconscious of the grammatical basis for his categories and that, although he intended to classify the attributes of objects, he was involuntarily led to recognize "the distinctions which his language exhibits between its principal classes of forms" (Benveniste, 1958: 70). The nineteenth-century philosopher and historian, on the other hand, sees Aristotle as deliberately utilizing these grammatical distinctions as the clue for a systematic choice and arrangement of the categories. But according to Trendelenburg such grammatical considerations served Aristotle only for the initial discovery of the scheme. Once discovered, he developed the categories in such a way as to neglect their origin and consider only the intrinsic nature of the objects and concepts classified.[13]

Benveniste's suggestion that Aristotle was as it were forced by the structure of Greek to choose just these categories is really indefensible, as Vuillemin has pointed out.[14] In this and many similar cases, linguistic relativism draws a fallacious inference from a trivially true premiss. It is of course true that no one is free to think outside the structure of any language, if by 'thinking' one means thinking thoughts expressible in language. (And unless we specify this sense for 'thinking', the claim may not be true at all. Musicians, artists, even scientists would deny that all their thinking is linguistic in form. Einstein is said to have perceived some of his major theoretical insights at first in a kind of musical or pre-linguistic intuition, before spelling them out in statements and formulae.) But if to express one's thoughts one must inevitably use the forms of the language, it does not follow that one cannot use these forms to draw distinctions which the language itself initially ignores, or use these same forms to deny the importance of other distinctions which the language imposes. As we shall see, Aristotle makes use of the categories in both ways, but primarily in the former: to show, for example, that a term like *good* or like *belongs to* (ὑπάρχειν) represents different logical structures corresponding to different categories. In such matters the form of a thinker's conceptual freedom is defined by, and thus dependent upon, his relation to a given language (or to several, if he knows more than one); but his use of that freedom is not determined by the structure of the language in question.

But if Benveniste's larger claim can be set aside without hesitation, that is not the case for Trendelenburg's more cautious statement of the hypothesis

of the grammatical origin of Aristotle's scheme. It is true that Trendelenburg's view has also been generally rejected by students of the categories, but their reasons are not always cogent.[15] Most of the opposition fails to distinguish between the question of origin and the question of philosophic intent or motivation. Because Aristotle's intention in constructing the scheme, as judged from the use he makes of it, is clearly not linguistic or grammatical, it is inferred that the scheme itself cannot (or should not) have been based on grammatical distinctions. But there are two quite distinct questions: (1) why construct a scheme of categories? and (2) why choose this particular set of categories? In answer to (1), the evidence (above all from the *Topics*) suggests that Aristotle's aim was to set up distinctions of logical importance that were often overlooked because of superficial uniformity in their linguistic expression. But in order to draw these distinctions it was of course legitimate (and, in some sense, inevitable) that he should rely after all upon contrasting terms and phrases from the language itself. Why this particular list of ten? The grammatical considerations alleged by Benveniste and Trendelenburg represent a plausible conjecture, as long as we add the qualification that Aristotle chose just those linguistic contrasts (as between *where* and *when, acting* and *being acted upon*) which seemed to him of genuine philosophical importance.

We know after all that such grammatical clues could have guided Aristotle, because we see that they did in fact guide a modern logician. Bertrand Russell once wrote:

> Although a grammatical distinction cannot be uncritically assumed to correspond to a genuine philosophical difference, yet the one is *prima facie* evidence of the other, and may often be most usefully employed as a source of discovery. ... In what follows, grammar, though not our master, will yet be taken our guide (Russell, 1903: 42).

In principle Russell's procedure corresponds exactly to Trendelenburg's hypothesis for Aristotle. Of course there are significant differences which limit the force of this parallel. Unlike Aristotle, Russell can refer to an established grammatical theory, fixed since antiquity and essentially unchallenged down to his own time. Furthermore, Russell explicitly depicts his own inquiry as one of 'philosophic grammar', involving a logical analysis of 'the proposition'. Aristotle and Plato, on the other hand, were pioneering innovators at the very beginning of our grammatical tradition. They could not take for granted any grammatical theory as a guide. Furthermore, they carefully distinguished their own grammatical terminology in the analysis of sentence structure from their logical or ontological terminology in the theory of predication – the theory of which Aristotle's categories form a

central part.[16] Thus the *Categories* introduce their topic as "things signified by what is said without combination", where the phrase "without combination" (*κατὰ μηδεμίαν συμπλοκήν*) shows precisely that Aristotle is here not concerned with sentence structure or propositional form.

The fact remains that the grammatical correlations noticed independently by Trendelenburg and Benveniste do exist, and the suggestion that they may have served as a clue to Aristotle's choice of just these ten categories is a historical conjecture that we can neither confirm nor refute. Despite the absence of any adequate grammatical theory in his time, Aristotle's powers of insight were probably equal to the linguistic discoveries that Trendelenburg ascribes to him. But unfortunately we have no direct evidence as to the origin of the scheme, since nowhere do we find it *in statu nascendi.* Both in the *Topics* and in the *Categories*, which are pretty certainly the two oldest among the extant works in which the categories appear, the doctrine is introduced as a finished whole, with the same ten categories named in the same order. (*Topics* I.9: *Cat.* 4). If we compare Trendelenburg's conjecture with the suggestion made by Gomperz (1912: 39), that Aristotle "imagines a man standing before him, say in the Lyceum, and passes in successive review the questions which may be put and answered about him", we see that the two conjectures are not only equally plausible, but fully compatible. Aristotle may indeed have begun by analyzing and classifying the kinds of questions that can be asked about a given man. And he may well have been guided in this analysis at first by the more common interrogative forms of the language, and then by other linguistic distinctions that reflect concepts of philosophic importance, like the distinction between the active and the passive voice. But of course his classification was not dictated by the forms of the language. There are, for example, many Greek interrogative forms of which he took no account (including *πότερος* 'which of two?', *πόθεν* 'whence', *ποῖ* 'whither?', *πῶς* 'how?', as well as the declined forms of *τίς*: *τοῦ*, *τινός* 'whose?' 'from whom?', *τίνι* 'for whom?').

There is more to be said on the conjectural origins of Aristotle's scheme, but this can best be said below, in connection with what I call Stage Zero of the theory. For convenience and clarity of exposition, I shall divide my discussion of the categories in Aristotle's extant works into three stages, corresponding to three treatises or groups of treatises. Stage One is represented by the theory of categories in the *Topics*. Stage Two corresponds to the doctrine of the *Categories* and the *Analytics*. Stage Three is the doctrine of *Metaphysics* Δ.7 and, more generally, the doctrine of the *Metaphysics*, the *Physics*, and other systematic treatises such as the *De Anima* and the *Nicomachean Ethics*. In Stage One the table of ten categories is presented as a

classification of predicates and types of predication; there is no corresponding analysis of subjects and consequently no theory of primary substances as the basic subjects of predication. Stage Two provides us with the doctrine of primary substance and with Aristotle's classical analysis of predication; but there is still no theory of Being structured by the categories. In Stage Three we get the full 'ontological' application of the categorial scheme, as an answer to the question ποσαχῶς λέγεται τὸ ὄν; "In how may ways is Being said?" or "How many ways are there for a thing to *be?*" (less accurately: "How many senses are there for the word *being?*"). It is, I think, indisputable that the exposition of the doctrine falls into these three stages, and it is natural to think of these stages as chronologically distinct. But the chronological sequence can scarcely be urged as a matter of historical fact, since there is no external evidence for the relative dating of the treatises. I myself see no reason to doubt that the *Metaphysics* is later than the *Categories*, and that the *Analytics* are later than the *Topics*. But the relative date of the *Topics* and the *Categories*[17] is not easy to establish, and in every case there is the possibility that later additions have been made by Aristotle himself to an 'early' treatise.[18] In the case of Aristotle's extant treatises almost all chronological conclusions are based upon internal evidence only, and hence they have no justification beyond the light they shed on internal discrepancies of doctrine or formulation. For our purposes, the division into three stages could just as well be understood as a convenience of exposition rather than as an historical claim. In this case – and, I believe, in most other cases of 'development' within the extant treatises – the sequence of stages represents moments in the progressive development and exposition of a single, complex doctrine, rather than shifts from one view to another view incompatible with the first. When Aristotle wrote the *Topics* he did not have (or if he had, he preferred not to mention) the doctrines of primary substance and the multivocity of Being. But once he had formulated these doctrines, there is little or nothing in the use made of the categories in the *Topics* that he would be required to give up. (The same probably holds *mutatis mutandis* for the relationship between his account of argument in the *Topics* and his theory of the syllogism in *Prior Analytics* I; though in the discovery of the syllogism there is a much greater element of novelty, and hence of discontinuity, than in the development of the theory of categories.)

The three stages represented in the extant works must have been preceded by an initial phase of reflection and discovery, a stage in which the list of categories as we find it fixed in *Topics* I.9 and *Categories* 4 gradually took shape. We may label this Stage Zero, since it is unattested by any document and must be reconstructed from circumstantial evidence only. As we have

seen, part of this evidence is provided by (1) the names and ordering of the ten categories and (2) the nature of the examples given. To this we may add (3) the name *category* (κατηγορία) itself, and (4) the most likely starting point in Plato's late work (namely, *Sophist* 251A–B). There are finally (5) some indirect clues in the way the categories are referred to in the *Topics*, which we take as the 'earliest' work in which the doctrine appears.

STAGE ZERO. To begin with the characteristic name. κατηγορία is the abstract action noun from the verb κατηγορεῖν, which Aristotle adapts from its old juridical sense 'to accuse (X of doing Y)', 'to speak against (X and charge him with Y)' in order to create the new technical term 'to predicate (Y of X)', that is: 'to say of (X that it is Y)'. Aristotle needs a new technical term for he is the first one to work out an explicit theory of 'predication' or 'saying Y of X'. But of course an awareness of the problem of predication is something that Aristotle inherits from Plato. Plato's own concern with this problem is most dramatically expressed in the *Sophist*, where Plato, while struggling with the difficult task of defining Being and Not-Being, suddenly shifts to what seems a more tractable difficulty: "let us say in what way we address the same thing by many names."[19] The interlocutor asks for an example, which is provided as follows:

> We speak of a man, for example, and name him many things [or "we apply many names to him"], attributing colors to him and figures and magnitudes and vices and virtues, and in all these cases and thousands of others we say not only that he is a man, but also that he is good and an infinity of other things; and in other instances too on the same principle we thus posit [as subject][20] each thing as one and again call it many things and by many names (*Sophist* 251 A8–B3).

Here Plato confronts the problem of predication in terms of the One and the Many: beneath the semantic contrast of one thing, many names, lies the more strictly logical (or ontological) problem of one subject (e.g. one man), many attributes. Plato moves on quickly to the Communion of Forms as providing the conditions for true and false discourse, and to the analysis of discourse itself in terms of the simplest proposition, consisting of one noun (or name) and one verb: *Theaetetus flies, Theaetetus sits.* Aristotle follows the same path but more slowly, pausing to deal at length with each topic as it arises. The noun-verb analysis of the proposition is pursued in the *De Interpretatione*, but the corresponding logical-ontological relation of subject to attribute is dealt with in the *Categories* and, more generally, in the theory of predication. It is essential to recall that in this theory the terms for 'subject' (ὑποκείμενον) and 'predicate' (κατηγορούμενον) do not refer to linguistic items

or sentence-constituents but to the extralinguistic things which are 'said' or signified in sentences. (For Aristotle as for Plato, the terms for the corresponding sentence-constituents are ὄνομα 'noun' or 'name', and ῥῆμα 'verb'.) Just as in the pre-philosophical use of κατηγορεῖν for 'accusation' a crime is asserted of a man, so in κατηγορεῖν as 'predication' an attribute is asserted of a subject entity, and typically of a man.

Whereas Plato is concerned here only with the fact that many attributes are asserted of a single subject, Aristotle pauses to consider how many different ways there are of asserting attributes, or of 'saying something of something'. (λέγειν τι κατά τινος: we must not translate this as 'saying one thing of *another* thing', since one of the key results of Aristotle's categorial analysis is to distinguish accidental predication, in which one thing is asserted of another, from essential predication, in which the predicate is not other than the subject.) He thus distinguishes the ten forms or 'figures of predication' (τὰ σχήματα τῆς κατηγορίας) or the ten kinds or 'genera of predications' (τὰ γένη τῶν κατηγοριῶν). The latter designation may have been the earliest one, since it appears in *Topics* I.9. Aristotle seems to have followed Plato in taking a human being as specimen subject. As we have seen, in distinguishing the kinds of things that can be said of such a subject he may well have been guided by grammatical hints, though not in any slavish way. The result is a kind of rough sketch of the analysis of an object-language for basic subjects (concrete individuals) and simple or elementary predicates. But to describe Aristotle's scheme in this way calls for several qualifications. In the first place, Aristotle is out to classify not words but things, not predicate-expressions but attributes or properties. Secondly, as a classification of predications or predicates, the scheme does not initially apply to the subjects of discourse as such. A concrete subject is taken as given; predication in the first category simply specifies *what it is*. (Thus τί ἐστι rather than οὐσία is the intitial designation of this category in *Topics* I.9.) Furthermore, as a classification of basic attributes the scheme is possibly incomplete (for instance, psychological predicates like *thinking* or *feeling pain* do not have any obvious place), probably redundant (*habitus* or Having and *situs* or Posture may be included under Quality as ἕξις and διάθεσις, as Aristotle perhaps recognized in later lists, where these two minor categories are no longer mentioned), and certainly incoherent in one respect. This concerns the category Time or 'when', which cannot provide simple predicates for individual subjects. *Socrates is today* and *Socrates was yesterday* are not proper sentences either in English or in Greek. Here I suspect Benveniste's accusation may be partially justified. Aristotle was genuinely misled by the surface parallelism between πού 'where' and πότε 'when', since both repre-

sent fundamental classes of adverbs with standard verbs: *Socrates runs in the Lyceum, Socrates runs today*. But in this use the adverb is of course not predicated of the subject: like many adverbs, it modifies the verb.[21] The first-order use of adverbials of place, as in *Socrates is in the Lyceum*, has no equivalent for adverbials of time. I can see no principle to justify the category 'when' that would not require us also to introduce other second-order adverbial concepts such as *easy, difficult, fast, slow*, for which the scheme provides no place.[22] And the anomaly shows up in Aristotle's philosophical applications of the scheme: there is no derivative concept of 'change of time' corresponding to change of place, change of quality, of quantity and of substance.

For the philosophical motivation of the scheme in Stage Zero our safest guess would be: to pursue in detail the analysis of predication which Plato had recognized as a problem, and to show how many different kinds of predication can be distinguished under the apparently unitary form of basic statements, i.e. under the elementary sentence forms of Noun-Verb or Noun + Copula + Predicate.[23] Beyond this one might add: and to prepare the ground for a rejection of Plato's doctrine of Forms. But for this guess there would not be any clear circumstantial evidence. In choosing a human being as his specimen subject, he is, as we have seen, following a good Platonic precedent. We could imagine Stage Zero as belonging to Aristotle's first work as a docile disciple, if we supposed that he ever was such.

To specify the relationship between linguistic and philosophic considerations at this stage, perhaps the best formula is the one we have quoted from Russell. In exploring the diversity of predication (that is, of the relationship *Y is said of X*), Aristotle attends to linguistic distinctions not as his master but as his guide, at least for surveying the terrain. The different interrogative forms, together with the various grammatical distinctions noted by Benveniste and Trendelenburg, are utilized by him in order to make clear that a sentence of the type *X is Y* (or *XY's*, where *Y* stands for a verb) may express a number of quite distinct kinds of judgmental or conceptual ties, corresponding to a number of different kinds of factual configurations and, ultimately, to a number of different kinds of entities: substances, qualities, quantities, and the like. Thus the categorial scheme takes a linguistic analysis only as its point of departure: the intended movement is in a different direction. On the one hand, a grammatical distinction may be, in Russell's words, *prima facie* evidence of a philosophical difference. On the other hand, many crucial differences will ordinarily be masked by similar linguistic expression. Hence the theory moves *from* grammatical considerations to an analysis of the underlying logical or conceptual structures, with the aim of revealing ontological differences. In this sense the theory of predi-

cation was intended, from the beginning, to become what it is explicitly in the *Metaphysics*: a contribution to the analysis of being, to the theory of the structure of reality. Aristotle's conception of the strict parallelism between language, thought, and reality (as sketched in *De Interpretatione* 1) guarantees that the only philosophically interesting analysis in linguistic terms will be one that seeks to avoid or expose logical fallacies by revealing and reflecting in discourse the real connections between things. In this perspective philosophical grammar, conceptual analysis, and ontology are not properly distinct enterprises, though different aspects may predominate at different stages of the investigation. And in an analysis of *how Y is said of X*, linguistic considerations will naturally predominate at the beginning.

STAGE ONE. The *Topics* is the 'earliest' work in which we can see the scheme of categories being used, and the only work outside the *Categories* in which the full list of ten categories is given (in I.9). But although the scheme is occasionally employed throughout the nine books of *Topics* and *Sophistici Elenchi* (= *Topics* IX), it was clearly not designed specifically for this purpose. The *Topics*, Aristotle's first work in logic (see *Soph. El.* 34), was conceived as a systematic handbook for that curious philosophical game which Aristotle calls 'dialectic', and which consists in trying to win an argument according to stylized rules modeled on the procedure of a Socratic ἔλεγχος or cross-examination.[24] In its external relation to the *Topics* the categorial scheme contrasts sharply with the fourfold division of 'predicables' (definition, genus, property, accident) on which the whole structure of the work rests.[25] The discrepancy between the categorial scheme as such and its use in the *Topics* shows up, for example, in the choice of a subject of predication. The dialectical game is normally played with theses of a general nature that take universal terms as subject, such as *whether all pleasure is good* or *whether any pleasure is good*. 'Pleasure' is of course not an individual substance, and in fact not a substance term at all. It will rarely happen that a dialectical debate focusses on a thesis with a given man or individual substance as subject, and there will be no particular preference for subjects in the first category. (In this respect the dialectical thesis of the *Topics* prefigures the syllogistic premiss of the *Analytics*, which consists almost exclusively of general terms, with no limitations on the category of the subject.) Hence although *Topics* I.9 lists the two anthropocentric categories of Posture and Having, the treatise scarcely makes any use of them. Instead it introduces an entirely new perspective, of which we assumed no trace in Stage Zero. According to this enlarged perspective of *Topics* I.9, in place of a fixed individual subject such as a man, the choice of subject ranges from category to category, whereas the question 'what is it?'

(*τί ἐστι*), which originally designated the first category, now specifies essential – that is, transitive – predication within each category. In Stage Zero we assumed a fixed subject (or at least a fixed type of subject) and distinguished the various questions that could be asked concerning it; each question determined a range of possible answers that constituted a particular class or 'genus of predications' (*γένος τῶν κατηγοριῶν*). Thus in the initial analysis a predicate figures as one answer to a given question, and a genus of predication includes all possible or 'appropriate' answers to the same question (whether true or false). On this view, the question *what is it?* specifies the first category. In the new perspective of Stage One as represented by *Topics* I.9, the category of the subject varies while the question *what is it* applies within every category.[26] It is obvious that the former perspective must be the original one, since not only does it explain the interrogative form of categories like *ποσόν*, *ποιόν*, etc., but it alone permits us to distinguish the various categories, whereas the second perspective must simply take this distinction for granted. We need both perspectives, however, – that is, we need the more flexible scheme of Stage One, in which the question *what is it?* belongs primarily to the first category, but secondarily to any category – in order to reach the first major philosophical achievement of the theory: the generalized distinction between essential and accidental predication, between predication within one category and predication across categorial boundaries.[27] The philosophical consequences of this distinction are left for the *Analytics* to draw; but the possibility of drawing them is given by the wider standpoint of *Topics* I, which also provides the needed terminology in the phrase *ἐν τῷ τί ἐστι κατηγορεῖσθαι* 'predicated in answer to the question *what is it?*'[28] The notion of essential as opposed to accidental (cross-categorial) predication thus arises at the point of convergence between, on the one hand, the rudimentary categorial analysis of predication (with an initially limited use of *what is it?* for subjects in the first category only), and, on the other hand, the wider concern for definition and genus-classification of all kinds of subjects that is characteristic of dialectic. This wider, definitional function of the *what-is-it?* question continues the older use of the *τί ἐστι* question by Plato, and presumably by Socrates before him, in the search for definitions; the narrower application of the phrase to the first category is specifically Aristotelian.

The combination of both perspectives seems to be a new departure in the *Topics*. In another respect the *Topics* continues what we have assumed as the viewpoint of Stage Zero. Since the categories are "kinds of predications (or predicates)", the subject of predication itself is in principle not classified by them. Insofar as primary substances like an individual man are not properly predicates at all, they do not have an obvious place in the first category,

understood literally as a "kind of predication". But of course Aristotle does in fact want to include them in this category. This inclusion, or this readjustment of the notion of a category, dominates the scheme as presented in the *Categories*. It rarely occurs explicitly in the *Topics*, which in this respect remains more faithful to the etymological sense of κατηγορία.[29]

The philosophical motivation for the scheme of categories in the *Topics* is to a large extent clear and uniform throughout: it serves to analyze diversity of meaning – that is, to reveal differences of logical structure, differences that affect the truth value of the sentence – within the uses of a single linguistic form, and thus to expose fallacy in argument. More specifically, its primary functions in the *Topics* are (1) to distinguish the various uses of a term that is homonymous or "said in many ways", and (2) to resolve fallacies based on the form of linguistic expression (σχῆμα λέξεως). (In the present context, 'homonymy' and 'said in many ways' are used interchangeably for what we may call multivocity. For the later distinction, see note 47 below.) The scheme is so convenient that its applications are not limited to these two functions. For example, it can also serve as a test of definitions: the genus must belong to the same category as the species defined (IV.1.120^{b}36–121^{a}9). But the two uses mentioned are the most characteristic. Thus the first application of the scheme in *Topics* 1.15 is to analyze the multivocity of the term *good* (107^{a}3–12). And the most intensive use of it is in the *Sophistici Elenchi*, in connection with the fallacy of expression (λέξις). Chapter 22 of this book begins: "And it is clear how we are to confront the fallacies which are due to the fact that things not the same are said in the same way, since we possess the genera of predications (ἐπείπερ ἔχομεν τὰ γένη τῶν κατηγοριῶν, 178^{a}5)". The categorial distinctions are specifically designed to point out differences in things which are not really "said in the same way, but seem to be so because of the expression" (διὰ τὴν λέξιν, 178^{a}24), to point out, for example, that a verb such as *to see* (ὁρᾶν), which is active in form like *to cut*, in fact indicates passivity or being-acted-upon like the passive form *to be cut*. And in the very next sentence Aristotle himself draws the parallel between this kind of linguistic deception and homonymy (178^{a}24–28).

It is in this connection that the categories are used for the first time in the discussion of a major philosophical issue, not in the *Topics* as such but in the ninth book on Fallacies (*Sophist. Elenchi*). The scheme does not appear in the five or six topical devices (τόποι) specifically aimed for arguing against "those who posit Ideas".[30] But the categorial analysis is used, curiously enough, to show how the Third Man argument against the Forms can be refuted, by denying that the universal *man* "which is predicated in common

of all [particular men]" is a substance or τόδε τι, a definite individual subject, but by insisting instead that it must be "a quality or relation or quantity or something of this sort" (178^b36–179^a10). This breaks the regress by refusing to allow the universal predicate *man* to function in turn as the subject of transitive or essential predication. Unlike 'Socrates is a man', '*Man* is (a) man' is not a τί ἐστι predication in the first category, and it is not even true, if *Man* itself is not a concrete individual (τόδε τι). This means avoiding the regress by giving up the Platonic conception of the Forms as independent entities (οὐσίαι), but Aristotle is polite enough not to point this out. Whether for reasons of personal discretion or because of the limited and almost pre-philosophical role he assigns to dialectic as studied in the *Topics*, Aristotle is not prepared to present the scheme of the categories here as a machine of demolition for use against the ontology of Forms. The categories figure merely as an instrument of logical analysis, a contribution to the theory of meaning in the specifically Aristotelian sense of revealing logical differences under surface similarities of language. And 'primary substances' or sensible individuals are not yet terminologically distinguished from 'secondary substances' (their species and genera).

Of course we need not believe that the author of the *Topics* (including the book of *Elenchi*) could not see where this logical analysis was heading. He is certainly no orthodox Platonist: there is something almost provocative about this long, systematic account of "dialectic without the Forms", as Solmsen (1968) has called it. And Aristotle's treatment here of the Third Man argument clearly implies the anti-Platonic consequence which he does not state. He may have composed the *Categories* practically at the same time, and in this treatise the ontological implications of the categorial scheme are quite unmistakable. Does it follow that the scheme was designed from the beginning with the problem of Forms in view, as Aristotle's own way of dealing with the Third Man argument? The suggestion has been made by G.E.L. Owen, and presented with great learning and acuteness, that "Aristotle's criticism of Plato led him to draw some distinctions in his account of predication", in fact that such criticism "lay at the root of his theory of predication and the categories" (Owen, 1965: 137). It had been noted independently by Kapp (1920: 238f.) and Wilpert (1949: 89, n. 132) that the treatment of the Third Man in *Soph. Elenchi* 22 is closely paralleled by a statement of the argument quoted by Alexander from Aristotle's lost treatise *De Ideis* (fr. 4 Ross = fr. 188 Rose). Now the *De Ideis* is concerned at length with arguments for and against the existence of Forms, reflecting lively controversy over this theory in the early Academy. It is natural to suppose, then, that Aristotle actually began his study of predication with these controversies in mind, and that he

came to the scheme of categories, and to the doctrine of substance which completes it, as his solution to a problem which Plato himself had raised in the Third Man argument (in *Parmenides* 132A–B) – a solution which is at the same time a rejection of the theory of Forms as such. This is the account of the origin of the categories that Owen (1965) develops in some detail.

The view presented here is not strictly incompatible with this account, though it differs considerably from it in emphasis. If I have assumed (with Kapp and Gillespie) that Aristotle's reflections on predication took their starting-point from the *Sophist* rather than from the Third Man of the *Parmenides*, that is not because I claim to know where Aristotle in fact began. (Nor is there any reason to suppose that he could not have had both aspects of the problem of predication in view from the beginning.)[31] The starting-point in the *Sophist*, with its relatively modest logical problem of how one man can be said to be many things, has the advantages of simplicity and economy. It permits a straightforward linear account of a step-by-step development (or at least a step-by-step exposition) of the doctrine, beginning with attention to ordinary questions about a particular man, and gradually rising to the metaphysical confrontation with the Forms. It also offers a natural explanation of the initial list of ten categories, including Having and Posture, a list that is not so easy to explain if one begins immediately with problems in the theory of Forms. Hence I would accept Owen's account of the roots of the theory only as applying to Stage Two – and I would agree that that stage is pretty clearly in view when we get to *Sophistici Elenchi* 22. But there is a certain methodological advantage to presenting Stage Zero and Stage One as 'earlier'.

On the other hand, I think there can hardly be any doubt of the correctness of Owen's principal point (against Jaeger), that Aristotle's logical and metaphysical interests were closely interconnected from the beginning. But it is very much in Aristotle's manner to develop the logical interest in predication separately with primary attention to equivocation and fallacy in argument, until the analysis was fully worked out, and then to apply it to larger philosophical issues when the time was ripe. We may compare the way in which the formal theory of the syllogism was completed in the *Prior Analytics*, before being incorporated within a general account of scientific knowledge in the *Posterior Analytics*. With some qualifications, we may also compare the gradual emergence of the notion of 'focal meaning' in the terminological studies collected in *Metaphisics* Delta, before the crucial application of this notion to the definition of ontology in *Metaphysics* Gamma (to be discussed below, under Stage Three). This pattern of 'gradualism' reflects in part Aristotle's characteristic feeling for the autonomy of a special

science or inquiry; but it also reflects a natural reluctance "to practise pottery on a large jar", as Plato puts it in the *Gorgias* (514E).

STAGE TWO. The ontological implications of the categorial analysis are clearly stated in the *Categories*, probably for the first time.[32] Although Plato's doctrine of Forms is not mentioned in the treatise (which to this extent observes the principle of discretion exemplified in Aristotle's discussion of the Third Man in *S.E.* 22), no reader can fail to recognize the consequences of Aristotle's claim that the only true *οὐσίαι* – the only true entities or realities – are primary substances, sensible particulars like an individual man or horse. This anti-Platonic bias of the *Categories* is, as has often been noted, even more extreme than that of later works such as the *Metaphysics*, where, after his open and decisive break with Platonic doctrine, Aristotle is willing to reapply the term *πρώτη οὐσία* 'primary entity' to forms or essences (*Met.* Z. $1032^{b}2$, $1037^{a}5$, $^{a}29$, $^{b}3$, etc.) It is perhaps a mark of its 'early' date, reflecting a period when the break with Platonism was of central concern, that the terminology of the *Categories* so emphasizes Aristotle's commitment to an ontology that is just the reverse of Plato's. (And it is not merely a question of terminology: by recognizing the principle that "knowledge is of the universal", the ontology of Aristotle's *Metaphysics* becomes in fact more 'Platonic' than that of the *Categories*. This is of course no reason for doubting the authenticity of the *Categories*. Whether the two doctrines of *οὐσία* are compatible is too large a question to discuss here, but in any case both conceptions are deeply imbedded within the *Metaphysics* itself.) Since concrete individuals are the basic subjects, of which everything else is predicated, "if there were no primary substances it would be impossible for there to be anything else" (*Cat.* $2^{b}5$). In the case of secondary substances like man or animal, the form of designation (*τὸ σχῆμα τῆς προσηγορίας*) seems to signify a concrete entity (*τόδε τι*), but in fact it rather signifies a quality (*ποιόν τι*). "For the subject is not one, as in the case of primary substance, but man and animal are said of many [subjects]" ($3^{b}16$). The logical point made against the Third Man argument in *S.E.* 22 is thus reformulated in the context of a theory of substance or entity (*οὐσία*) where the ontological claim is unmistakable: no universal is a substance. The message for Platonism is clear, if still implicit. It is made explicit later, for example in *Metaphysics* Z.13 where Aristotle argues at length that no universal is a substance, for "if we do not grant this there are many [undesirable] consequences, including the Third Man" ($1039^{a}2$); and there the immediate connection with the rejection of Forms is established in the following chapter (*Met.* Z.14).

Chapters 2–5 of the *Categories* offer a systematic exposition of Aristotle's

theory of predication. In this theory, the subject-predicate relation is primarily ontological: the subjects (*ὑποκείμενα*) are *entities*; what is predicated of them are *properties* or *attributes*. In a secondary sense, the relation 'being predicated of' is also seen as semantic, in the technical sense of 'semantic' in modern logic: the *name* of an attribute or the *word* (*ὄνομα*) that designates it may be predicated of the *thing* that is subject (e.g. at $2^a20–32$). The subject-predicate relation is thus primarily a relation of thing to thing and secondarily a relation of thing to word. Aristotle never regards predication as a grammatical or linguistic relation of word to word, nor does he ever speak of subject and predicate as *concepts* united in judgment (though he does occasionally speak of judgment itself as the 'combination' or synthesis of concepts: *σύνθεσις νοημάτων* in *De Int.* 1, $16^a12–14$; ch. 3, $16^b20–25$; *De Anima* 430^a28, *συμκλοκὴ νοημάτων* at 432^a11).[33] The application of the subject-predicate analysis, and with it the categories, to the theory of judgment and to the analysis of the proposition as expressed in words are both post-Aristotelian, although they are natural continuations of Aristotle's own line of thinking about these questions. As a matter of historical fact, the notion of categories as 'concepts' (*νοήματα*) is one that is simply unattested for Aristotle – just as unattested as the much later notion of grammatical 'categories' as word-classes. Aristotle does of course recognize Noun and Verb as what we would call word-classes. But he never calls them 'categories' nor does he connect them with the categorial scheme in any way. (On one occasion, however, he does allude to a connection between the grammatical noun-verb analysis of the sentence and his own theory of predication. At *De Int.* 3, $16^b7–12$ he remarks that the verb or *ῥῆμα* is always "the sign of things said of something else", i.e. the sign of an attribute belonging to a subject. And in the same context he says of *is* – as copula verb – that it is not the sign of a thing or a fact, *πρᾶγμα*, but of a *σύνθεσις*: "the sign of a composition which cannot be understood without the components", i.e. without the presence of subject and predicate term.[34])

In this fully developed theory of predication the categories are presented in a new way, to include subjects as well as predicates. Hence the term *κατηγορία* (with its suggestion that the scheme classifies only predicates or modes of predication) is avoided in the initial exposition, where the ten classes are introduced as collecting whatever is signified by "things said without combination", i.e. by uncombined terms without the form of propositional unity. The result is to define the range of the categories as the domain of basic entities and properties, the *significata* of simple terms or basic words. This elimination of the reference to predicate position means that, in effect, the contents of the ten categories are now identified with the

terms of Aristotle's syllogistic. (It is essential for the syllogism that its terms admit subject and predicate position indifferently, since at least one term in every syllogism must figure in both positions.) Another move in the direction of the 'scientific' applications of the scheme may perhaps be seen in the fact that only the four major categories are discussed in any detail, and their discussion seems to prepare the way for the analysis of different kinds of change and other topics (such as discrete and continuous quantity) that will be pursued in the *Physics*.

In one respect the doctrine of the *Categories* appears narrower than that of the *Topics*. We have seen that *Topics* I.9 introduced a double construal of the scheme, which is presented first by keeping the subject constant and varying the question asked, and then by letting the subject range from category while the question remains a constant *what is it?* (*τί ἐστι*). Now the *Categories* makes almost exclusive use of the first construal. The *what-is-it?* question and the corresponding notion of essential predication (*ἐν τῷ τί ἐστι κατηγορεῖσθαι*) do not range over the categories but seem restricted to the category of substance. Hence the temptation might arise to regard the *Categories* as 'earlier' than the generalization of essential predication in *Topics* I.9, and even to regard it as representing the primitive Stage Zero of the doctrine which we found missing from the extant works. But this view would certainly be mistaken. There are many indications that the *Categories* cannot provide the 'original' formulation of the theory that is presupposed in the *Topics*. For one thing, the characteristic title *τὰ γένη τῶν κατηγοριῶν* 'kinds of predications' is never used in this treatise and, as we have observed, the term *κατηγορία* itself does not appear when the categories are introduced in chapter 4. Yet the *Categories* cannot belong to a period *before* this terminology came into use; the treatise shows familiarity with the derivative use of *κατηγορία* in which it does not designate 'predication' or 'predicate' as such but serves to replace the fuller construction 'kind of predication' (*γένος τῶν κατηγοριῶν*), i.e. as an abbreviated designation for what we call a 'category'. (Compare *Cat.* 8, $10^{b}19$–23 with *Topics* $103^{b}25$, 27, 29, 39. The term *κατηγορία* also occurs in its primary sense of 'predication' in *Cat.* 5, $3^{a}35$–37.) This initial avoidance of the standard terminology is of course no accident in the *Categories*: it hangs together with the explicit inclusion of primary substances in the first category, which is therefore no longer a genus of *predicates*. (The same innovation explains why the question *what is it?* is not used here as a designation for the first category. The designation of a primary substance as such, by pointing or even by pronouncing a proper name, would not normally count as an answer to that question.) Because the theory of the *Categories* emphasizes the role of individual substances as the

fundamental subjects which underly all predication, it neglects the pursuit of essence or definition (*τί ἐστι*) for categories other than substance as a merely distracting consideration. But although the *Categories* does not focus on this wider notion of essential predication, it does recognize the existence of such predication outside the first category. 'Being predicated in the essence' (*ἐν τῷ τί ἐστι κατηγορεῖσθαι*), does not appear under this title in the *Categories*, which speaks instead of 'being said of a subject' (*καθ' ὑποκειμένου λέγεσθαι*) in a special narrow sense. But this concept is illustrated in *Categories* 2 by an example from the genus of quality: "knowledge is said of grammar as of a subject" (1^b2), that is, it is predicated in answer to the question *What is grammar?* Hence the curious deviations of the *Categories* cannot be explained by assuming that it is more 'primitive' than the theory of the *Topics*. If accidental or cross-categorial predication is presented here under the rather unusual title of 'being present in a subject' (*ἐν ὑποκειμένῳ εἶναι*), this choice of terminology is presumably motivated by a desire to underline the ontological dependence of all other categories upon substance, and ultimately upon primary substance. (Outside of the *Categories*, the phrase 'being present in a subject' seems to occur in this sense only in the *Topics* 127^b1–4 and 132^b20 ff.) For what is present in a subject is "incapable of being apart (*χωρίς*) from that in which it is present" (1^a25). Thus the *χωρισμός* or separate existence of Forms like Justice, Whiteness, Equality or Magnitude is ruled out by definition.

It is in the *Posterior Analytics* that these deeper philosophical consequences of the categorial analysis are for the first time openly and explicitly drawn. (For present purposes I ignore the possibility that some parts of the *Metaphysics* may be 'older' than the *Analytics*.) Demonstrative science is said not to require that there be Forms or "some unity besides the many [particulars]": it requires only that we be able to predicate "one thing truly of many" (77^a5). It is above all in chapter 22 of *Posterior Analytics* I that Aristotle pushes the theory of the *Categories* to its logical conclusion: "Whatever does not indicate (*σημαίνει*) substance must be predicated of some subject, and there is nothing white that is not something else [essentially, substantially] which is white [as an attribute]. For we bid farewell to the Forms. They are mere twirpings; and even if they exist, they do not contribute to this discussion [of predication and scientific knowledge]. For demonstrations are concerned with terms like these [viz. substances and their attributes]" (83^a30–35). Plato's theory of Forms was required to account for the objects of knowledge and the ontological conditions of true and false discourse. (See, e.g. *Parmenides* 135 B5–C2.) Now that Aristotle has provided his own theory of scientific knowledge based on the syllogism and his own account of predi-

cation according to the categories, he can finally say goodbye to the Forms. The theory is not only incoherent (according to his own reading of the Third Man argument, quoted above); it is also superfluous.

The *Analytics* seem to develop another aspect of the categorial scheme which was not conspicuous in the *Topics* and the *Categories* but which is of great importance for the later history of the doctrine. This is the conception of the categories as the ultimate univocal predicates, the widest genera, each one the highest branch in a Porphyry tree (or in a converging cluster of Porphyry trees) of species-genus terms of increasing generality. The notion that predication is transitive within such a chain is familiar from the *Topics*. ("All the higher genera are predicated of the lower ones," *Top.* VI.5, $143^{a}21$; cf. $122^{a}3$–7.) Also familiar is the idea that terms like *being* (ὄν) and *one*, because they apply to every item in every category, do not form a genus in the logical sense required for definition ($121^{b}4$–8, $127^{a}26$–34; cf. $130^{b}17$). But "a genus is predicated synonymously of all the species" ($127^{b}6$). From all this it might be natural to conclude that the categories themselves, the 'genera of predications', would be the widest genera of definition, the last term of essential transitive predication. But Aristotle himself does not say so in the *Topics*, and perhaps he never says this explicitly anywhere in the *Organon*. The most likely explanation of this fact is that the definitional notion of 'genus', derived from Plato and enshrined in the fourfold scheme of predicables, was originally quite distinct from Aristotle's new notion of 'genus of predication' according to the tenfold scheme of categories.[35] A 'genus of predication' is not, as such, a genus for classifying anything but predicates or attributes. But as the categorial scheme was recast in Stage Two to embrace all the 'things' (ὄντα) signified by simple words, the two notions of 'genus' naturally began to fuse into one. This fusion is probably never complete; perhaps the closest Aristotle himself ever comes to identifying the two is a statement in *Met.* Δ.28, where difference "according to the form of predication of being" (καθ' ἕτερον σχῆμα κατηγορίας τοῦ ὄντος) is mentioned as one way of *differing in kind* or *in genus* (ἕτερα τῷ γένει λέγεσθαι, $1024^{b}10$–16). But some fusion of categorial and classificatory genus seems to be implicit by the time we get to *Prior Analytics* I.27. Here Aristotle divides all 'things' (ὄντα) into (1) sensible particulars, that cannot be properly predicated of anything else but are natural subjects for predication, (2) universals, that can be predicated of other subjects and serve as subjects of predication in turn, and (3) the uppermost terms or 'things' that can serve only as predicates for demonstration ($43^{a}25$–43). It is difficult to see how these ultimate universals, the upper bounds of strict predication, can be anything other than the categorial genera, the final answer to the *What-is-*

it? question for an item within each category. But Aristotle does not make this clear; he announces an explanation for later (43^a37).

The promised explanation comes in *Posterior Analytics* I.19–22 and most directly in I.22, in the passage immediately following the outspoken rejection of the Forms which we have quoted (from 83^a30–35). Aristotle is here considering whether chains of predication can go on to infinity or whether they must be limited at both ends. The categories are mentioned in connection with the argument that the chain of predicates will not be infinite in the 'upward' direction of increasing universality. "For of each subject will be predicated what indicates[36] some quality or some quantity or something of this sort or its essential attributes (*τὰ ἐν τῇ οὐσίᾳ*). But the latter are limited, and the kinds (*γένη*) of predications are limited. For [these are] either quality or quantity or relation or acting or being-acted-on or where or when" (83^b13–17). The first striking feature of this passage is that Aristotle lists only eight categories, with a clear suggestion that the list is complete. The 'anthropocentric' categories of Having and Posture have dropped out of sight, never to reappear. But the second point, which concerns us directly, is that the fact that the number of categories is limited will not prove Aristotle's conclusion, unless the chain of transitive predication is limited within each category. And this can only be so, it would seem, if the category itself is the most universal predicate, the final member of each chain.[37] It is remarkable, however, that Aristotle himself does not say this, neither here nor elsewhere as far as I can see. One is led to suspect that, in some sense, the categories as such were not conceived as proper predicates at all, and certainly not as true genera for definition. At least one passage in the *Metaphysics* seems expressly to deny that 'substance' (*οὐσία*) is a genus, just as 'being' and 'one' are not.[38] The later notion of the categories as 'primary genera' (*πρῶτα γένη*) or 'most generic terms' (*τὰ γενικώτατα*) is certainly not in accord with the letter of Aristotle's treatment, and probably not faithful to its spirit either.

Before passing to the third and final stage of Aristotle's doctrine, we must note another, even more fateful innovation of the *Analytics*. This is the use of the categorial scheme to indicate the diversity of the predicative link itself. "That X belongs to Y and that X is true of Y must be taken in as many ways as the categories are distinguished. ... And similarly for *not belonging*" (*Prior An.* I.37, 49^a6–8). Since the preceding chapter of the *Prior Analytics* has specified that *belonging* is to be understood "in as many ways as *being* is said and as *it is true to say that X is Y*", we stand here on the threshold of the multivocity of being: the doctrine that there are as many kinds of 'things' (*ὄντα*) as there are categories. This final, fully ontological application of the

scheme is not formulated until Stage Three, as represented in *Metaphysics* Δ.7. Yet in a sense the ontological application is latent throughout the more purely 'logical' use of the categories in the *Organon*. It is suggested by the doctrine of the *Topics* that 'being' (*τὸ ὄν*) is not a genus.[39] It is perhaps even more clearly hinted at in the *Categories*, insofar as the categorial classification is understood there as a division of *ὄντα* or 'things' (cf. *Cat*. 2, 1^a20). The passages just quoted from the *Prior Analytics* go one step farther, but they stop short of the fully ontological formulation. What is stated in these passages is not that there are as many kinds of 'things' as there are categories, but simply that when in formulating a syllogistic premiss we say *X is Y* or *Y belongs to X*, the uniformity of propositional form may conceal a diversity of logical relations between the terms, and the categories can serve to articulate this diversity. *X is Y* does not always mean that Y is a direct or essential predicate of X; it may be a quality or a relation, and these categorial distinctions may be taken "conditionally or absolutely, either alone or in combination" (48^a8). As an example Aristotle cites the case where one syllogistic term is *there is one science* and the other term is *contraries of one another*. To say that the former belongs to the latter is not simply to say that contraries are one science but rather "that it is true to say *of them* (*κατ' αὐτῶν*) that there is one science of them" (48^a5–9). The point is not that science and contraries are 'things' belonging to different categories (for contraries as such are not classified within any one category), but rather that beneath the single syllogistic scheme *Y belongs to X* there is a complex predicative relation that can be analyzed by means of the categories. Here as elsewhere in the logical works, the categorial scheme serves to reveal the diversity of logical structures beneath a surface similarity of formulation. (By diversity of logical structure I mean a difference that affects either the truth value of a given proposition or the valid inferences that may be drawn from it).

In two respects, however, these passages from *Prior Analytics* I. 36–37 point to the metaphysical application which characterizes the next stage of the doctrine. In the first place the scheme is explicitly connected with the analysis of *ποσαχῶς λέγεται* 'in how many ways [a given item] is said.[40] And in the second place, the verb *to be* (*εἶναι*) is introduced to indicate an item whose diversity can be analyzed by means of the scheme. No 'earlier' statement that being is "said in many ways" establishes this direct connection with the categorial analysis.[41]

STAGE THREE. The final conception of the categories as 'genera of beings' or, more typically as 'categories [literally 'predications'] of being'[42] is found

throughout the scientific treatises of Aristotle, in contrast to the logical works grouped together in the *Organon* where this view of the categories is not fully articulated. This ontological conception coincides with the use of the categorial scheme to distinguish how "*being* is said in may ways": the classification of 'beings' is carried out by distinguishing the ways in which *being* is said. Thus in the first book of the *Physics* this conception of the categories serves to refute Eleatic monism: for "*being* is said in many ways" (185^a21), but Parmenides and others have made the false assumption that "*being* is said in one way" or "said simply" (185^b31, 186^a24). In *Physics* III.1 the same principle is used to classify the kinds of motion or change, "for there are as many species (*εἴδη*) of change as there are of being" (201^a9, after the statement that there is nothing outside the scheme of categories; cf. 225^b5–16, 226^a23ff., 227^b6, etc.). The categorical division thus serves to distinguish coming-to-be and passing-away, as substantial change, from more superficial changes of place, size, or quality (*De Generatione et Corruptione* 319^a3–18; cf. 317^b5–11). In the *De Anima* the scheme is presupposed as a device for preparing the definition of the psyche by locating it within the "genus of beings" identified as substance (412^a6; cf. 402^a23–25). In the *Eudemian Ethics* the doctrine is invoked in an argument against the Platonic Form of Good: *good* does not constitute a single thing, since "it is said in many ways and in just as many ways as *being*" (1217^b25ff.); and this argument is repeated almost verbatim in the *Nicomachean Ethics* (1096^a17–29). But it is above all in the *Metaphysics* that Aristotle makes systematic use of the categories of being, not so much to refute Plato's doctrine as to establish his own conception of First Philosophy as the study of 'being qua being' (*τὸ ὄν ᾗ ὄν*).

The most fundamental (and for our purposes the 'earliest') statement of this fully ontological view of the categories is found in *Metaphysics* Delta, the book which is specifically devoted to *τὰ πολλαχῶς λεγόμενα* 'things said in many ways'. Chapter 7 deals with the multivocity of 'being' or 'what is':

> *Being* is said, first, per accidens and, next, per se. ... Things said *to be* per se are as many as things indicated by the figures of predication (*τὰ σχήματα τῆς κατηγορίας*). For in as many ways as these are said, in so many ways does *to be* (*εἶναι*) indicate. Now since of things predicated some indicate *what it is* (*τί ἐστι*), some indicate *of what quality* (*ποιόν*), some indicate *how much* (*ποσόν*), some *in relation to what*, some *to act* or *to be acted upon*, some *where*, some *when*, *to be* indicates the same as each of these. For there is no difference between *A man is healthy* and *A man enjoys-health* [viz. with the predicate *is healthy* expressed by a single verb form *ὑγιαίνει*, in contrast to the preceding expression by copula and participle *ὑγιαίνων ἐστίν*], nor between *A man is walking* or *is cutting* and *A man walks* or *cuts*; and similarly in the other cases. (1017^a22–30)

With one exception, I have rendered this passage as literally as possible, to avoid imposing upon it our own more abstract terminology and our practice of distinguishing between the use and mention of expressions. The exception is the verb σημαίνειν which I have translated throughout as *to indicate*, whereas the more literal rendering might be *to signify*. I have avoided the latter precisely because it could convey the misleading impression that Aristotle is here distinguishing – or attempting to distinguish – between linguistic signs and their 'meanings' or 'denotations'.[43] Quotation marks are not in order here, insofar as these would imply that Aristotle is mentioning the verb *to be* and asserting that it has so many different 'senses' or 'uses'. In fact he is not so much talking about the verb *to be* as, about being or beings, things that are said to be, things as described in different ways. And he expressly claims that the relevant distinctions do not depend in any way upon whether or not the verb *to be* occurs in the description.

Of course Aristotle is concerned here as elsewhere with linguistic formulations, both as masking ontological (or logical) distinctions and as exhibiting distinctions that are not logically significant. But the point of his denying that there is any difference between the noun-verb formulation *A man walks* and the noun-copula-participle form *A man is walking* is precisely to insist that neither *is* nor any form of *to be* need appear in an illustration of "the many ways in which being is said." It would be ridiculous to suppose that a sentence like *A man walks* or *A man cuts* illustrates a sense of the verb *to be*! But these sentences do illustrate a figure or form of the predication of being, namely a predication in the category of Action (ποιεῖν). Aristotle relies here on the fact that in Greek the linguistic force of the noun-copula-participle sentence does not stand in sharp grammatical contrast with the simple noun-verb sentence, as do the corresponding forms in English, where the two represent, in effect, distinct tenses. This use of the present periphrastic construction in Greek, which is idiomatic though not very common, provides a convenient device for introducing the verb *is* where it would otherwise not occur, and it thus furnishes Aristotle with a kind of canonical notation to make clear how 'being' or 'what is' is present in, and diversified among, the whole range of categories, regardless of the idiomatic form of the linguistic expression.[44] We may note, incidentally, that the eight categories mentioned here in Δ.7 are the same as those listed in *Posterior Analytics* I.22, $83^{b}15$–17, where, as we saw, the reference to a limited number (πεπέρανται) suggests that the list is complete.

A recent commentator on this passage asks whether Aristotle here means "to distinguish and classify (1) different ways of understanding propositions of the form '*X* is *F*' or (2) different senses of the word 'exist' " (Kirwan,

1971: 141). Neither of these alternatives seems faithful to Aristotle's primary intention, though each gives us a partial insight into the consequences of his analysis. The first suggestion comes closer to Aristotle's aim, if we take '*X* is *F*' as the general form for propositions or assertions. The verb *to be* in Greek, and notably its participle *ὄν*, can express any form of reality and any type of sentential truth-claim. The strategy of Aristotle's categorial analysis is to reveal the subject-predicate structure of reality underlying every true propositional claim of the elementary or first-order language canvassed by the categories. His aim is to distinguish the 'things' or 'beings' which constitute this structure into 'entities' (*οὐσίαι*) and 'attributes' (*ὑπάρχοντα*) and to classify the 'attributes' according to the eight modes of predication. All 'entities' belong of course in the first category; their initial characterization was given by the doctrine of 'primary substance' in the *Categories*, and the central books of the *Metaphysics* will be devoted to a deeper analysis. Among their attributes, some are also 'substantial': these belong to an entity or substance in virtue of what it is and hence they specify just *what it is*, *ὅπερ ἐστίν*. (As the *Topics* put it, they are "predicated in the essence *ἐν τῷ τί ἐστι*" of the subject.) The other attributes are divided according to the seven remaining categories. If we think of '*X* is *F*' as the general predicative form for *X* as a substance, we can say that the classification of per se *being* in Δ.7 is a classification of eight types of attribution (or eight kinds of attributes) corresponding to eight different substitution classes of values for the complex variable 'is *F*'.[45] On the other hand if we translate *ὄντα* as 'existents', then we can say that by distinguishing a class of entities and eight kinds of attributes Aristotle has distinguished eight kinds of existents. (There are only eight, not nine distinct kinds; since the being of the substantial attributes, the species and genus of a substance, is not different from the being of the substance itself.) If we insist on the formal mode, we can even rephrase this as a distinction between eight senses of *exist*. But the artificial nature of this rewriting of Aristotle's text should be clear from the examples he gives (where *is* occurs as copula verb), and from his statement that "it makes no difference" whether or not the various types of being are expressed by the verb *to be*.

By calling attention to the logical equivalence of the two sentence forms *X is Y* and *XY's* (where *Y's* is a finite verb form), Aristotle makes clear that his classification of beings or kinds of being according to the categories will apply to all sentences of both forms, i.e. to all simple sentences in the language. And this naturally follows from the way the scheme was introduced in the *Categories*, as classifying 'things signified' (or 'things indicated') by all uncombined words, by all subject and predicate terms.

In the *Categories*, the verb *σημαίνειν* ('signify' or 'indicate') expresses a

relation between the various categories and the λεγόμενα or 'things said'.[46] In the context of *Categories* 2 and 4, it is natural to take the 'things said' as the expressions which Aristotle offers as examples: *man, horse, white,* etc. Thus it would be the word *man* which signifies a substance, the word *white* signifies a quality, and so on. But although this is the natural reading for us, it is not the only possible one. The λεγόμενα or 'things said' can also be the concept *man* or the entity *human being* (as described by the word or as intended by the concept). Aristotle's semantic vocabulary is so impoverished, and he shows so little interest in using it carefully, that any commentator is obliged to rewrite the doctrine to some extent in order to give a clear and coherent exposition. Now if we take σημαίνειν in *Categories* 2 and 4 to express a word-thing relation, we will of course expect the verb to represent the same relation in Met. Δ.7. But that makes Aristotle say that the word *to be* (εἶναι) signifies in as many ways as the categories (1017[a]24 and 27). So it is not only the twentieth-century prevalence of the linguistic turn or the philosophical attraction of 'semantic ascent' that tempts a modern reader to understand the doctrine of πολλαχῶς λεγόμενα as an account of different senses for the word *being* or *to be*.

Nevertheless, as I have argued, this reading of Δ.7 cannot be entirely correct. Here as often, σημαίνει serves in different occurrences to express different aspects of a complex semantic relationship that includes among its terms not only the word *being* and the ten categories but also the items predicated in each category (τὰ κατηγορούμενα at 1017[a]25), and these 'things predicated' include the actions of walking and cutting, but not the words *walk* and *cut*. Neither the categories themselves nor the 'things' they classify can be properly identified as linguistic expressions. And, as we have seen, even the 'being' that signifies or indicates in all these ways need not be expressed by an occurrence of the verb *to be*, although thanks to a normalizing participial periphrasis it may be so expressed in each case.

In order to clarify this obscurely semantic use of the verb σημαίνειν in Δ.7 we may consider a related passage where Aristotle proves that he can be clear and precise in such matters when he chooses. In *Categories* 1 he tells us exactly what he means by ὁμώνυμα or "things said in several ways".[47] When things have only a name in common but the definition [literally "the account of what the thing is", ὁ λόγος τῆς οὐσίας] which corresponds to the name is different, they are called *homonymous*."[48] Thus it is things, not expressions, that are homonymous. And to some extent it is also things, not expressions, that are said in many ways. The homonymy of *being* would consist in the fact that many things were said to 'be', or called *beings*, that had only the name in common. As Aristotle will point out in *Met.* Γ.2, since the diverse beings of

the categories have more than a name in common, they are not strictly homonymous. But they are nonetheless "said in many ways", for they certainly satisfy the second clause in the definition of homonymy. The diverse kinds of beings, or the various ways in which they are said to 'be', do not have any single definition or any single account (λόγος) of what it is for them to 'be'. The account will differ for each category: for 'walking' or 'cutting' to be is to be an action; for 'white' to be is to be a color, and hence a quality; for Socrates or Coriscus to be is to be a man, and hence a primary entity or substance. But since 'being' itself is no genus, there is no common character that can be cited in the λόγος τῆς οὐσίας, the account that answers the question "what is it for this to *be?*" for all the categories at once, or even for any two.[49]

Like homonymy, 'being said in many ways' (πολλαχῶς λέγεσθαι) is a threefold relation between (1) a single word or phrase or (in this case) a family of 'paronymous' verbal forms, like *being, is*, and *to be,*[50] (2) a plurality of diverse things to which the word is applied, and (3) a different account of what the thing is corresponding to each application, that is, corresponding to each kind of thing to which the word applies. This third item is what we might call a distinct 'sense' of the term, or a distinct 'concept' that it expresses; but Aristotle calls it simply the λόγος τῆς οὐσίας, the account or statement of what it is for something to be *X* (where *X* is the term under discussion). This triple relation structures Aristotle's account of τὰ πολλαχῶς λεγόμενα in *Metaphysics* Delta. Each chapter of the book is unified by (1) its concern with a single term *X* (in our case τὸ ὄν or εἶναι). It is diversified by (2) the variety of kinds or classes of things to which *X* applies. And Aristotle endeavors to clarify this diversity by (3) giving an account or definition of *X* for each application, an acccount which specifies what it means in this particular case for the thing to be called *X*. In analyzing the diversity of τὸ ὂν καθ' αὐτό 'what is per se' or 'being proper'[51] in *Met.* Δ.7 he offers not a definition but a reference to the scheme of categories. If we are to give a full exegesis of Aristotle's procedure, we must bear in mind that (2) and (3) are not identical. On the one hand (3), the account of the different applications, is given by the list of eight categories (completed by some characterization of each, such as the detailed account given for four of them in *Categories* 5–8). But (2), the things to which *being* applies, are not the eight categories as such but the entities and attributes they classify – not substance but Socrates, Coriscus, man, and animal; not quality but white, black, round, square, knowledge, justice, etc.; not action but walking, running cutting, and so forth. Thus the three factors

in the full relationship are (1) the term *being*, (2) the full range of entities and attributes, and (3) the division into eight categories, with some account of each one.

It is this complexity that is masked or (to put it less kindly) muddled by Aristotle's free and easy use of the term σημαίνειν. And the complexity is increased by the fact that he is concerned not only with the actual use of *to be*, for example in normal copula sentences, but also with potential uses (we might say, with 'zero uses') of the verb in sentences that can be rewritten in copula form. He is concerned, in short, with predication or attribution in general (for that is what *being* means here), and not with the verb as such. He is also concerned with what we would call the *existence* of subjects and attributes, but the notion of existence is conceived in such a way as to be fully absorbed into the analysis of attribution, as we shall see. With all this in mind we may try to give a more accurate account of what is intended by σημαίνειν in our passage from Δ.7 as follows. I give an interpretive paraphrase after each section of the translation (using 'indicate' for σημαίνειν throughout).

"Things said to be per se ("said to be in their own right") are as many as are indicated by the figures of predication." The 'things' in question correspond to (2), the full set of entities and attributes. These are numbered (ὅσα) in eight classes, as 'indicated' or 'signified' by (3) the eight categories or forms of predication. To all of the items in (2) is (or may be) applied (1) the term *being*, but in the eight distinct ways specified by (3). Aristotle is here developing, by means of his own categories, a lesson taught by Plato in the *Sophist*: to be is always to be something-or-other. (Compare Owen, 1965, 2: 76f.) There is no intelligible concept of being or existence in general, which is not the being of something definite. Hence to be is always to be something definite. With regard to the beings envisaged here, to be (or to exist) is always to be a substance, to be a quality, or to be a member of some other category. (This leaves many questions open: for example, in what way can essences or matter and form be said to be? But to answer such questions the doctrine of categories is not enough. We need other concepts of being, such as potency and act).

"For in as many ways as [these] are said, in so many ways does *to be* indicate." The term *being* applies to all items in (2), but in the eight distinct ways (τοσαυταχῶς) marked by (3).[52] The subject of "these are said" (λέγεται) should properly be all the entities and attributes in (2), but of course as diversely said according to (3) the categorial scheme (ὁσαχῶς).

"Now since of things predicated (τῶν κατηγορουμένων) some indicate

what it is, some indicate *of what quality*, some indicate *how much*, some *in relation to what*, some *to act* or *to be acted upon*, some *where*, some *when*, *to be* indicates the same as each of these."

Here it is the categorial items of (2), such as Socrates, man, white, walking, and the rest, that are said to indicate or signify the eight members of (3). (So σημαίνειν here is a thing-thing, not a word-thing relation.) The term *being*, correspondingly, indicates (3) the particular category of the item to which it is applied (Socrates, man, white, etc.). In modern terminology we might say that the connotation of *being* (as substance, quality, etc.) is determined by its denotation in each particular case (as applied to Socrates, white, etc.). The next sentence of the text, beginning "For there is no difference between *A man is healthy* (ἄνθρωπος ὑγιαίνων ἐστίν) and *A man enjoys-health* (ἄνθρωπος ὑγιαίνει)," makes clear that the term *being* is thought of here as expressed by the copula *is*, whether occurring in a copula sentence or virtually present (in 'zero' form) in the noun-verb sentence. Being here is thought of primarily in terms of predication. In a sentence like *A man is healthy*, the term *is* expresses (or 'connotes') primarily the being of the quality health, and only secondarily and indirectly the being of the substance man, insofar as the former depends for its existence upon the latter. In a sentence like *Socrates is a man* or *A man is an animal*, the term *is* expresses the being of the first category alone. Note that in the last clause quoted "*to be* indicates (σημαίνει) the same as each of these", σημαίνει seems to represent a word-thing (or word-concept) relation like 'connotes', a relation between the verb *is* and the corresponding category. But the phrase "indicates the same as each of these" refers back to the earlier clauses of the sentence ("of things predicated some indicate *what it is*", etc.) where, as we have seen, the subject of σημαίνει is not a word at all but a categorial item like a man, health, or walking; and the semantic relation is that between a particular item and its category, or between a particular denotation of *being* and the corresponding connotation. So there is clearly no hope of assigning any single or uniform interpretation to the term σημαίνειν. Aristotle uses the term freely for all three sides of the triangular relation we have specified: (i) for the word-thing relation between an expression and a particular item in a category (roughly, our 'denotes'), (ii) for the word-thing or word-concept relation between the expression and a corresponding category (roughly, our 'connotes'), and (iii) for the thing-thing or thing-concept relation between a particular item (or denotation) and its category (the corresponding connotation of *being*).

If our analysis has done justice to the semantic complexity of this passage, it is easy to see how misleading it would be to describe Aristotle's

procedure here as distinguishing various sense of the term *being*. This description is correct only if by 'senses' of *being* one understands (2) the whole range of entities and attributes to which *being* applies, as classified by (3) the eight "ways in which *being* is said",[53] i.e. by the categorial divisions. Initially, Aristotle may be seen as distinguishing uses of the word *being*. But ultimately he is concerned to classify beings according to the categorial distinction between kinds of being.

We must note again that, in this conception of being, and as a consequence of Plato's principle that to be is always to be something definite, the concept of existence is in effect absorbed into, and articulated by, the categorial analysis of predication. For Socrates to be or to exist is *to be a man*. For white to exist is *to be a color*, that is *a quality* (belonging to some substance). For walking to exist is *to be an action* (performed by some human being, or by some animal). For three yards to exist is *to be a length*, that is, a *quantity* (possessed by some body). We need to add these phrases in parenthesis in order to specify fully what it is to be a color, an action, or a length – what it is for these attributes to exist. Only in the case of an attribution of substance, as when *man* is predicated of Socrates, is there no need for any such specification (since *to be a man* just is *to be a substance* of a definite kind). And this need, which reflects the ontological dependence of the other categories upon substance, will justify Aristotle's claim at Zeta 1, $1028^{a}35$ that the account (λόγος) of substance must figure in the account or definition given of the other categories. A definition is a λόγος οὐσίας, an account of what a thing is, or what it is for that thing to be, in other words, for it to exist as that definite thing. Any full account of what a quality is must say that it is *an attribute of a substance*. In this respect, the ontological dependence upon substances entails that the definition of a quality must contain a reference to substance. (It is perhaps a mere looseness of formulation that Aristotle says at $1028^{a}35$ that it must contain the λόγος of substance. But perhaps he had in mind the fact that in order to understand what a quality is, one must understand what a substance is.)

We have now reached the fully ontological application of the categorial scheme. Before concluding with a brief mention of the development of this doctrine in the central books of the *Metaphysics*, we may pause to assess the significance here of the linguistic facts with which this study began. We see that in *Met.* Δ.7 Aristotle begins to delimit and classify a wide range of 'things' or 'beings' (ὄντα) by means of the system of categories worked out in his analysis of the logical structure of predication. The philosophical legitimacy of his procedure here depends in large part upon the fact that the categories of predication have themselves already been delimited. It would be difficult

to justify the list of eight categories if they were introduced here for the first time simply as a classification of modes of being or types of 'things'. But, as we have seen, the list of categories has in fact been in use at least since the *Topics*, and in use precisely as a device for analyzing phenomena of ambiguity or multivocity, as part of the larger enterprise of distinguishing the logical structure of what is said from the surface structure of the way in which it is said. As Aristotle claimed in the *Sophistici Elenchi*, we know how to deal with fallacies based upon superficial uniformities of language "since we have the genera of predications" as our device for logical analysis (*S.E.* 22, 178^a5). In the *Metaphysics*, where it is no longer a question of resolving fallacious arguments but still one of revealing logical structures under the surface diversities or uniformities of language, it is natural to make use of the device that has proved its mettle in humbler tasks of the same sort. (Here as elsewhere I mean by logical structure whatever makes a difference for the truth value or the logical consequences of what is said.)

Now the naturalness of the categorial scheme was from the beginning recommended to Aristotle's readers and auditors by the fact that it relied upon familiar distinctions of meaning or function between the common interrogative words, and between other obvious linguistic contrasts such as the opposition of active and passive verbal forms, from which the deeper conceptual distinction between acting and being-acted-upon could be distilled. Those commentators who regard the categorial scheme as originally created or discovered for the analysis of 'what is', as a classification of the various kinds of beings "by simple inspection of reality" as Ross put it,[54] would deprive Aristotle's procedure in $\Delta.7$ of its naturalness, and of its legitimacy also. They would, in effect, make his procedure arbitrary and circular. For if the categorial scheme had originally been formulated as an ontological classification, it would hardly be a step forward to proceed to use the scheme for this purpose in $\Delta.7$, and it would scarcely be an interesting insight to discover that "*being* indicates in as many ways as the categories". Furthermore, if the scheme is specifically designed for this ontological assignment, the adequacy of the scheme for this purpose must somehow be established, and it is not easy to see how one could justify this particular list of categories as a direct account of reality. The whole point of Aristotle's application of the categories to the analysis of being is that the scheme had originally been introduced as a natural and obvious device for making some distinctions in what is said about a given subject, and that its value had already been established by its use in analyzing predication, in revealing multivocity, and in clarifying the logical structure of what is asserted. It is, I think, of crucial importance not only for tracing the development of the

doctrine of categories but also for understanding what kind of an enterprise Aristotle takes ontology to be, to realize that the road to an analysis of Being passes not by way of a direct inspection of reality, nor by an inventory of the objects of experience or the concepts which structure our knowledge of the world (for in that case how could one explain the absence of the concept 'cause' from the categories?), but by way of the analysis of λόγος 'rational discourse' and the theory of predication, conceived of as the assignment of attributes or properties to entities in the world. If we so construe the scheme of categories as to forget that κατηγορίαι τοῦ ὄντος means literally '*predications* of being', we lose the key to understanding Aristotle's metaphysics as a theory of being qua being.

We do not need to deny that, from the beginning, Aristotle had the ontological application of the categories in mind. But what a reading of the *Topics* and the other logical works clearly shows is that the scheme is developed there without any direct anticipation of the ontological doctrine, primarily as a useful instrument for distinguishing predications and analyzing arguments, a scheme organized on the basis of some very modest linguistic and logical observations, and specifically upon the kinds of questions that can be asked about a man in the marketplace.

Having now reached the stage represented in the *Metaphysics*, where the scheme of categories provides an account of the "many ways in which *being* is said", we cannot follow the doctrine of categories further without embarking on a general discussion of Aristotle's ontology. Some mention must be made, however, of the primary use of this doctrine in the *Metaphysics*, the use for which the survey of ποσαχῶς λέγεται τὸ ὄν. in Δ.7 is the direct preparation. This is the doctrine of 'focal meaning', the doctrine that although being is said in many ways it is not strictly homonymous, but that these various ways are all related to a single central case and thus form a systematic unity (πρὸς ἓν λέγεσθαι 'said in relation to one [thing]').[55] Aristotle's stellar use of this doctrine in the *Metaphysics*, in chapter 2 of Book Gamma and chapters 1 and 4–5 of Book Zeta, is the application of 'focal meaning' to the multivocity of *being* as articulated by the categories. Before considering this central case, however, we must observe that the doctrine itself is a general one: it applies not only to *being* but to many other terms that are 'said in several ways'. Even in its application to *being*, the doctrine is not strictly limited to the scheme of the categories: thus among the things said 'to be' in a derivative or secondary way are not only the items in the seven non-substantial categories but also the becomings and destructions, the privations and negations, of substance and its attributes (Γ.2, 1003^b7–10). If we first consider terms other than *being* in the lexical

survey of *Metaphysics* Delta, we can see the notion of focal meaning taking shape in a number of chapters where Aristotle is concerned not simply to distinguish and define the different ways in which a given term is said, but where he also seeks to identify a 'strict' and 'primary' use from which the others are in some sense derived or on which they logically depend.[56] It looks as though in working out this systematic study of "things said in many ways" Aristotle came to see the importance of a fact to which he had at first paid little or no attention: namely, that the diverse applications of any single term that he had been in the habit of describing as homonymous rarely if ever had "only a name in common".[57] Even his specimen of homonymy in *Categories* 1, the use of the term ζῷον 'living thing' for pictures or images as well as for animals, is not a merely verbal coincidence, since Greek art is largely devoted to renderings of men and animals, and a good likeness seems to be 'alive'. But the philosophical terms studied in *Metaphysics* Delta often show much deeper and closer logical connections between their various uses.

Once this general insight took shape in Aristotle's thinking, the special application of the notion of primary and secondary uses to the multivocity of *being* was, in effect, given in advance. The primary case of being had already been identified in the claim of the *Categories* that without the being of primary substances there could not be anything else at all (2^b5). In the metaphysical doctrine of focal meaning this claim is simply rephrased, with the omission of any special reference to 'primary' substances: the primary being (τὸ πρώτως ὄν) is substance; "the others are called beings in virtue of the fact that some are quantities of 'what is' in this way [sc. in the primary way, as substance], others are qualities of it, others are affects (πάθη) or something else of the sort" (Z.1, 1028^a18; cf. Γ.2, 1003^b7–19). Thus the doctrine of focal meaning here is precisely the doctrine of the ontological dependence of the other categories on substance. (Hence, despite its great convenience, the term *focal meaning* may be misleading, insofar as it suggests that Aristotle is relating senses of the verb *be* to some primary sense, rather than relating different kinds of being to one primary case of being.) And it is, furthermore, the claim that items in the first category have a peculiar right to the title of ὄν 'what is', because only substances are ὄν ἁπλῶς 'being simply, without qualification': there is some doubt whether things like walking and enjoying-health and sitting are being or not being, "for none of them either is naturally in its own right, nor is it capable of being separated from substance.[58] ... It is because of the latter [viz. substance] that each of them is, so that substance will be the primary being and not being-qualified (ὄν τι) but being simply and without qualification (ὄν ἁπλῶς)" (Z1, 1028^a20–31). Finally, the ontological dependence of the other categories on substance will

be reflected in the logical fact that the definitional account (λόγος) of what substance is will be present in, or presupposed by, the account of the other categories (Θ.1, 1045^{b}29–32, referring back to Z.1, 1028^{a}35 and Z.4–5).

Thus the multivocity of the term *being*, like the categorial account (λόγος) which structures this manifold, forms a unified system by its reference to, and its dependence upon, a single nature and principle (*πρὸς ἕν καὶ μίαν τινὰ φύσιν*, Γ.2, 1003^{a}33; *πρὸς μίαν ἀρχήν*, 1003^{b}6), which is the being of substance, "because of which the others are beings too" (Z.1, 1028^{a}29–30). The philosophical importance of this doctrine is, first, that by uniting the diverse range of beings into a single structure it explains and justifies the possibility of First Philosophy as the study of being as such (*τὸ ὂν ᾗ ὄν*). Although being does not constitute a single genus, it may nevertheless provide the object for a single science in virtue of the systematic unity constituted by these relations of dependence upon the primary being of substance. The scheme of categories, reinterpreted in the context of focal meaning, thus serves to redefine ontology – the ancient study of Being inherited from Parmenides and Plato – as primarily the study of Substance or entity (Z.1, 1028^{b}2–7). And this involves, of course, more than a shift in terminology. It means moving the philosophical concept of Being or reality away from the 'otherworldly' implications of Eleatic and Platonic doctrine, which relies heavily on the 'veridical' connotations of *τὸ ὄν* as *true* reality, the ultimate or underlying object of true knowledge, standing in some kind of ontological contrast with the world of falsehood and appearance.[59] Instead, Aristotle's doctrine of *οὐσία* proposes a 'thisworldly' concept of being, a descriptive rather than a revisionary metaphysics (to use Strawson's terms) oriented towards a commitment to the commonsense ontology implied in everyday talk about ordinary subjects, about 'entities' such as men and mammals, cabbages and kings. Of course the Platonic strain in Aristotle's thinking remains vital, and it exerts ontological pressure in a different direction through the claim that knowledge and definition take as their object the essence and the universal (*Met.* Z, 1031^{b}6, 1035^{b}34, 1036^{b}8, ^{a}28, etc.). Being is still, for Aristotle as for Plato, the object of knowledge and the correlate of true discourse. But even in his theory of definition, which remains relatively Platonic in its concern with 'essence without matter" (1032^{b}14), Aristotle's new ontological orientation introduces a crucial distinction. Just as *being* (*εἶναι*) and *what is* (*τὸ ὄν*) belongs primarily to substance but derivatively to the other categories, so the essence (*τὸ τί ἐστι* 'the what-is-it' and *τὸ τί ἦν εἶναι* 'the being-what-it-is'[60]) and the definition which formulates the essence belong primarily to substance and derivatively to beings in the other categories. Of course

it is possible to define a quality or a quantity; if it were not so, geometry could not be a science. But these definitions are, in the ontological perspective, derivative and dependent in a way that the definition of substances is not (Z.4, $1030^{a}17-^{b}7$; Z.5, $1031^{a}1-14$; see our discussion above, p. 264). This is the final development of the double perspective on the categories proposed in *Topics* I.9: the question *τί ἐστι what is it?* belongs primarily to the first category, but it has a secondary use in each of the others.

This is as far as we can or need go in following the use of the categorial scheme in the *Metaphysics*. The doctrine of categories is not, after all, the central thesis in Aristotle's ontology. It provides a kind of introduction to metaphysics and to theoretical philosophy in general, by sorting and circumscribing the domain of things that are beings per se, 'in their own right'. When the categorial scheme is applied in connection with the focal meaning of *being*, it effects a preliminary unification and ordering of this domain in its ontological dependence on substance or 'entity'. But in the final analysis the scheme does not tell us what is to count as an entity or how the structure of a substance is to be understood. The deeper analysis of substance itself and its relation to the dependent beings must be carried out by the use of different concepts, *φυσικῶς* not *λογικῶς* as Aristotle will sometimes say, concepts derived not from the theory of predication but designed specifically for the analysis of natural motion and change: concepts like mover and goal (*τέλος*), matter and form, potency and act. Both physics and metaphysics culminate in the theory of the Unmoved Mover, the entity (or entities) whose being is actuality, the final cause of all motion and change, the 'primary substance' on which all other substances depend (Λ.7, $1072^{b}14$; cf. Γ.2, $1003^{b}16-17$, E.1, $1026^{a}27-31$). In this ultimate perspective for ontology, which Aristotle himself never worked out in full detail, the preliminary contribution of the categories in distinguishing substance from the various kinds of dependent beings must seem quite modest and elementary. All the more reason, however, why the categorial scheme itself should be firmly rooted in humble, everyday questions like *What is it? How big? Of what sort or quality? In relation to what? Where?* and *When?*[61]

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NOTES

[1] Strictly speaking five of the category names are the indefinite forms which differ from the interrogative only in intonation, as reflected in the post-Aristotelian written accents: *πού* 'somewhere' instead of *πού* 'where?', etc. (The name of the first category, when given in this form rather than as *οὐσία* 'substance', is always interrogative: *τί ἐστί* 'what is it?' even when abbreviated as *τὸ τί* 'what?'.) Literally, then, the five names in question are 'so much' or 'of some quantity', 'of some sort', 'relative to something', 'somewhere', and 'at some time (or other)'. The logical relation between the interrogative and indefinite forms is precisely that between 'where?' and 'somewhere' in English. The latter is a kind of variable or place-holder for a whole range of possible or appropriate answers to the question 'where?' 'when?', etc.

[2] William Ockham, *Summae Logicae Pars Prima*, ed. P. Boehner (Franciscan Institute Publ., St. Bonaventure, N.Y. 1951) p. 108. Ockham implies that this observation was suggested by Averroes: "Sumitur autem distinctio istorum praedicamentorum, sicut innuit Commentator 7° Metaphysicae, ex distinctione interrogativorum de substantia sive de individuo substantiae" (*ibid.* p. 107).

[3] See Gillespie (1925: 80ff.) and the quotations from Gomperz and Grote cited by H. P. Cooke (1938) in his introduction to the Loeb edition of the *Categories*. So also J. L. Ackrill (1963: 79): "The actual examples strongly suggest that he [sc. Aristotle] thinks about answers to questions about a *man*."

In *Post. An.* II.1 Aristotle lists four quite different questions or subjects of inquiry (*τὰ ζητούμενα*) that classify four types of knowledge: (1) *Is p the case or not?* (2) *Why is p so?* (3) *Does x exist?* or *Is there an x?* and (4) *What is x?* Except for the last (*τί ἐστι*) these questions have no relation to the categorial scheme, and hence their role in Aristotle's theory of science will not be discussed here.

[4] Edmund Husserl (1913: Vol II, Part I, 317): "Die Bedeutungen unter apriorischen Gesetzen stehen, welche ihre Verknüpfung zu neuen Bedeutungen regeln". For the concept of semantic kernel (*Kernform, Kerninhalt*) and transformation, see *ibid.* pp. 324–26. For some comparisons between Carnap and Husserl, see Bar-Hillel's article, 'Husserl's conception of a Purely Logical Grammar', *Philosophy and Phenomenological Research* 17 (1956–57), pp. 362–69.

[5] I am indebted to Henry Hiż for this and other information about Leśniewski.

[6] On different kinds of grammatical categories see H. Hiż (1960). For categorial grammars see John Lyons (1968), 227–31. For categories in Montague grammars, see R. Montague (1974).

[7] Wittgenstein (1921: 33) (3.344): "What signifies in a symbol is what is common to all the symbols that the rules of logical syntax allow us to substitute for it."

[8] Ryle's article contains two references to Carnap (Ryle, 1938: 173n. and 184). Compare Carnap (1937: 296): "A w... question demands in reference to a certain sentential function the assertion of a closed full sentence (or sentential framework)." In such a question "the genus of the arguments requested" may be indicated by "a specific w... interrogative (such as 'who', 'where', 'when')." Ryle's sensitivity to the role of questions as an instrument of logical analysis may also reflect a native Oxford tradition. Thus Cook Wilson had taught that the logical subject-predicate structure of a statement could be determined only by reference to the question it was answering. See Passmore (1966: 246).

[9] For an ambitious sketch of a theory of 'subcategorization' and 'selection rules' that

might cover this ground, see Noam Chomsky (1965), 148–61. We recognize, I think, some echo of Husserl and Ryle in Chomsky's claim that a sentence like *The kidney has an ant* "is not false or impossible but senseless" (p. 161).

[10] "The categories classify things, not words." "It is not linguistic items but the things they signify which are 'said of a subject' " (Ackrill, 1963: 73, 75 and passim). This view is certainly correct, if 'things' translates ὄντα. But of course it remains to be specified just what ontological status can be assigned to 'things' like qualities, relations, and the species and genus of a substance. It turns out, I think, that the linguistic dimension will be essential in any full explication of what Aristotle means by κατηγορεῖσθαι. What is certain is that Aristotle's theory of categories is not formulated as a theory of linguistic meaning or linguistic structure, and hence not properly as a doctrine in linguistics at all, though there is perhaps a natural linguistic 'translation' of the doctrine as a theory of elementary sentences or deep structure. See in this connection the interesting suggestion of Gillespie (1925: 80f.) that in canonical form the sentences analyzed by the categories take the proper name of a person as grammatical subject.

For a reasoned rejection of the view that Aristotle's categories are designed to detect or diagnose semantic anomalies, see also J. M. E. Moravscik (1967), 138f.

[11] Thompson's example of Aristotle exposing "a genuine category mistake" is *Posterior Analytics* I.22, $83^{a}33$, where the Platonic Forms are dismissed as "mere noise" (τερετίσματα 'chirpings') after an analysis of predication based on the categorial scheme. Even this example, when examined in context, does not fit the conception of categories as a device for drawing the line between sense and nonsense. Aristotle's point against Plato is that a property like 'white' cannot be a self-subsistent entity but can exist only as the attribute of some substance. To treat 'white' as an independent entity is, indeed a category mistake, in that it means putting 'white' in the wrong category. But this is literally a mistake, not a piece of nonsense. Aristotle's characterization of the Forms here as "mere noise" is deliberately abusive, but it does not involve the explicit use of any criterion of meaningfulness. So much is clear from the following words: "and if they exist, they are irrelevant to our discussion." For more on this passage see above, p. 250.

[12] See especially Trendelenburg, 1846: 23f. and 1852: 54f. with note to p. 55. Trendelenburg had first published his views in a Programmschrift *de Aristotelis categoriis*, Berlin, 1833. Benveniste's presentation of his parallel view as a novelty strongly suggests that he was unaware of Trendelenburg's theory, although much of the nineteenth-century German literature on the categories was devoted to refuting it. It was Vuillemin (1967: 75n.) who pointed out the parallel.

[13] "Aber die grammatischen Beziehungen leiten nur und entscheiden nicht" (Trendelenburg, 1846: 209). "Ita Aristoteles categoriarum genera ex grammaticis fere orationis rationibus invenisse videtur, inventas autem ita pertractavit, ut, relicta origine, ipsam notionum et rerum naturam spectaret" (1852: 55).

[14] See Vuillemin (1967), pp. 76f., 110. Vuillemin's long study of the *Categories* (pp. 44–125) contains a subtle attempt to show that Aristotle's table of categories is characterized by an elaborate formal organization, based in a systematic way upon his theory of predication and preparing (via the Postpredicamenta, *Cat.* 10–15) for the metaphysical development.

[15] Trendelenburg (1846: 194f.) mentions the immediate opposition of Ritter, Zeller, and Spengel. To these we may add the monograph of Bonitz (1853), which is a direct attack on Trendelenburg's view. See more recently the sympathetic remarks of E. Kapp

(1920): 223, n. 12 and 236) who nevertheless rejects Trendelenburg's grammatical thesis. Gillespie (1925: 80) has a more positive appreciation.

[16] For the systematic distinction between the grammatical terminology (*ὄνομα*, *ῥῆμα*) and the corresponding terms for subject (*ὑποκείμενον*) and predicate (*κατηγορούμενον*), see Kahn (1973: 46–48).

[17] I agree with Ackrill (1963) in assuming without argument that the *Categories* is an authentic work of Aristotle. This has rarely been questioned by Aristotelian scholars writing in English, but one may note that a recent study in French refers to "the author of the *Categories*" in a way that suggests he is not Aristotle (Mansion, 1968: 197 note).

[18] Thus the first chapter of *Topics* I, which contrasts dialectic with scientific demonstration and offers the same definition of 'syllogism' as in the *Prior Analytics*, was probably added or rewritten after the *Analytics*. Contrast the last chapter of the *Topics*, i.e. *Sophistici Elenchi* 34, which looks back on a completed task with obvious satisfaction, but with no similar hint of greater things to come.

[19] *Sophist* 251A5: *λέγωμεν δὴ καθ' ὁντινά ποτε τρόπον πολλοῖς ὀνόμασι ταὐτὸν τοῦτο ἑκάστοτε προσαγορεύομεν*. Note that the verb *προσαγορεύειν* here prefigures Aristotle's use of *κατηγορεῖν*. It occurs frequently in this way in Plato, but never becomes a technical term. Cf *Soph.* 223D6, 232A6, 236C4, etc. The disadvantage of *προσαγορεύειν* (and *προσειπεῖν*, etc.) from Aristotle's point of view is that it tends to suggest 'semantic' predication of word for thing, rather than the thing-thing attribution that Aristotle has primarily in view.

[20] As has been noted by others (e.g. Kapp, 1920: 245 n. 31), *ὑποθέμενοι* here ('positing as subject') directly prefigures Aristotle's term *ὑποκείμενον* 'subject', literally 'what is posited [as a basis for predication]'.

[21] Such adverbs are thus naturally regarded as second-order predicates, or functions of functions. Compare Harris' (1968: 183) treatment of adverbs like *slow* (*slowly*) and *easy* (*easily*) as f^2 (functions of functions) rather than f^1 (functions of basic arguments) in his 'abstract system'.

[22] Perhaps we might justify Aristotle's inclusion of this category by pointing out that while other adverbial modifiers are optional, some indication of time is obligatory (in Greek, and indeed in Indo-European), since it is expressed in the tense of the verb. Kurt von Fritz suggests to me (in a letter) that the inclusion of time or 'when', although grammatically anomalous, "just goes to show that Aristotle's viewpoint from the very beginning was not a purely grammatical or linguistical one", but that he appreciated the ontological importance of the parallelism of space and time, explicitly recognized later by Kant (and then translated into terms of epistemology, as generally with Kant). I would like to emphasize my agreement with the view that Aristotle's interest in the question of categories was *never* a purely grammatical or linguistic one. His recognition of the category 'when' prepares for the analysis of the concept of time in the *Physics* (IV.10–14), just as the category 'where' prepares for the analysis of place (*Physics* IV.1–5). I mean only to suggest that the original choice of just these ten categories can be understood only in terms of a grammatical analysis of the various ways of saying *Y* of *X*, where *X* is a concrete individual such as a man; and that when it is so understood the inclusion of 'when' is seen to rest upon a linguistic mistake – a mistake which Aristotle is obliged to correct in certain philosophical contexts, as when he silently omits 'when' in his analysis of change by reference to the categories.

[23] So Kapp (1920: 245 n. 32): "Was bei der Kategorienlehre ursprünglich behauptet

wird, ist die *Verschiedenheit* der Glieder der Einteilung gegenüber dem Schein der Einerleiheit." We have some fragmentary suggestions that other fourth-century thinkers regarded predication, particularly in the copula form *A is B*, as problematical, apparently on the assumption that *is* must have some one meaning (whether 'exists' or 'is identical with'). For attempts to avoid the copula in predication, see *Physics* $185^{b}27-32$. For the view of Antisthenes that of any one thing only one λόγος can be asserted, see *Metaphysics* $1024^{b}32$ and Gillespie (1913). For the importance of these discussions for understanding Aristotle's theory of categories, see Apelt (1891), 201–211.

[24] For this 'dialectical' background of the *Topics* and of Aristotle's approach to reasoning, see Kapp (1942), Chapter I: 'The Origin of Logic as a Science'; also Gillespie (1925: 79–84).

[25] For this contrast and for the role of the categories in the *Topics* see Kapp (1920), to whom I am much indebted here. It is unfortunate that Kapp's important article on the *Topics*, first presented as his Habilitationsschrift in 1920, was not published until 1968. As a result it was unavailable to the scholars participating in the Oxford Symposium Aristotelicum on the *Topics* in 1963, whose papers are published in *Aristotle on Dialectic* (1968), ed. G. E. L. Owen. In particular, S. Mansion's article 'Notes sur la doctrine des catégories dans les *Topiques*' would presumably have looked rather different if the author had been familiar with Kapp's study.

See also the important remarks on the development of the category doctrine in Kapp (1942), 23, 37–42.

[26] $103^{b}27-39$: "It is clear from these [categorial distinctions] that someone who indicates the *what-is-it* (ὁ τὸ τί ἐστι σημαίνων) sometimes indicates substance (οὐσίαν σημαίνει), sometimes quantity, sometimes quality, sometimes another of the [kinds of] predications. For when a man is displayed (ἐκκείμενον) and he says the thing displayed is a man or is an animal, he says *what it is* and indicates (σημαίνει) its substance (οὐσίαν, literally 'being' or '*is*-ness'); when a white color is displayed and he says the thing displayed is white or is a color, he says *what it is* and indicates quality; similarly, when a cubit length is displayed and he says that the thing displayed is a cubit or is a length (μέγεθος), he says *what it is* and indicates quantity; and similarly for the rest. For each of these, if it is said itself of itself [the species, e.g. *man* or *white*, of the concrete object] or if the genus [e.g. *animal* or *color*] is said of it, indicates *what it is*. But when [each] is said of another, it does not indicate *what it is* but how much or what quality or one of the other [kinds of] predications."

[27] See the last two sentences quoted in the preceding note. Compare *Topics* $120^{b}21-26$, where ἐν τῷ τί ἐστι κατηγορεῖσθαι is contrasted with ὡς συμβεβηκὸς (κατηγορεῖσθαι), and the former is indicated by the expression ὅπερ λευκόν 'what white [is]' and ὅπερ κινούμενον 'what being-moved [is]' as the essence of something, in contrast to συμβέβηκε κινεῖσθαι, *being moved* as a supervenient accident that may or may not apply to the subject. For the importance of this distinction in connection with the Third Man argument, see below; and compare Owen (1965: 135f.).

[28] First occurrence in *Topics* I.5, $102^{a}32$, and frequently thereafter.

[29] The inclusion of individual substances in the first category is most clearly suggested in the *Topics* by the use of the term τόδε τι to designate this category. Cf. *Topics* $144^{a}20$, *Soph. El.* $169^{a}34-36$, $178^{b}37-179^{a}10$. At $179^{a}1-2$ Aristotle seems to say that the individual Coriscus (or his name?) signifies the first category, designated as τόδε τι. But the *Topics* show no trace of a distinction between primary and secondary substance (except for the analysis of the Third Man in *S.E.* 22).

[30] See Solmsen (1968: 59f.), who gives a list of the passages (footnote 2 to p. 59). Many of them are discussed in detail by Owen (1968).

[31] In this connection one may compare the attempt of von Fritz (1931) to derive the theory of categories from a double root: (1) from the dialectical analysis of equivocations on the verb *to be*, and (2) from certain ontological difficulties in the theory of Forms, including the Third Man. In principle, then, von Fritz's theory corresponds to a conjunction of Kapp's account of the *Topics* (which I follow) and a kind of anticipation of Owen's connection between the categories and the controversy about Platonic Forms. In detail, however, it differs considerably from both.

[32] Arguments against the Forms are marshalled in the *De Ideis*, but it is not clear that any of them depend on Aristotle's own categorial scheme. The treatment of the Third Man argument in terms of predication (*κατηγορεῖσθαι*) in Fr. 4, Ross, seems to prepare the way for the categorial treatment in *S.E.* 22. My suggestion is that predication was at first dealt with separately in terms of the categories (Stage Zero and Stage One = *Topics* I–VIII) and in terms of the Third Man (*De Ideis*). *S.E.* 22 represents the point where the two treatments of predication converge. At *S.E.* 34 (184^b2) Aristotle says he has been engaged in the study of reasoning "for a long time". Some of this time may have been spent on the *De Ideis*, as well as on the *Topics*. And the *Categories* probably belong in about the same period. All three – *Categories*, *S.E.* 22, and *De Ideis* – seem to be presupposed by the abrupt dismissal of the Forms in *Post. An.* I.22. In this connection Professor E. Berti calls my attention to the use of *πρός τι* and *ποσόν* in *De Ideis* fr. 4 Ross (pp. 126f.), as showing that the categorial scheme is in fact presupposed by these arguments. Now the distinction between *καθ' αὑτό* and *πρός τι* is Platonic (for the passages in the dialogues see Julia Annas, 1974: 266 n. 30); and it served as the basis for a kind of proto-theory of categories in the Academy. But the reference to *ποσόν* does presuppose Aristotle's own scheme, and if this reference came from the *De Ideis* it would indeed establish the priority of that scheme. However, Julia Annas has more plausibly suggested (1974: 268) that the comment in question was added by Alexander.

[33] For these four distinct senses of 'predication' (syntactic, semantic, judgmental, and ontological), see Kahn (1973: 40–45). According to Passmore (1966: 247), three of these four senses were distinguished long ago by Cook Wilson.

[34] *De Int.* 16^b22–25. For the development of this remark into the modern theory of the copula, above all by Abelard, see Kahn (1972). Note that in the context of *De Int.* 3 the exact status of the copulative *σύνθεσις* is not determined, but it is most naturally understood as the composition of the subject and predicate concepts in judgment, which 'indicates' (*σημαίνει*) or posits a combination of subject and predicate 'things' (*ὄντα*) in nature (i.e. in a fact or an entity), and is in turn 'indicated' or signified by the verb *is* in a sentence of the form *A is B*. Compare the words-thoughts-things relations articulated in *De. Int.* 1.

[35] See Kapp (1920), 226–28.

[36] *σημαίνει*. For difficulties in interpreting the term see above, pp. 255 ff.

[37] This is the interpretation of Ross (1949: 384 and 578f.): "Aristotle's main purpose is to maintain the limitation of the chain of predication at both ends, beginning with an individual substance and ending with the name of a category" (p. 578). Ross' reference to the *name* of a category is a mistake, a mistake for which Aristotle must bear partial responsibility because of his inconsistent use of the term *σημαίνειν*. For the view of the categories as highest predicates see Brentano (1862), 102ff. with references to Philoponus and others in n. 118, p. 107.

[38] *Met.* I.2, 1053^{b}22–24 *οὔτε τὸ ἕν γένος ἐνδέχεται εἶναι ... οὐδὲ τὸ ὂν οὐδὲ τὴν οὐσίαν.* Note that in *Met.* B.3, 998^{b}15–18 the expressions *τὰ πρῶτα τῶν γενῶν* and *τὰ ἀνωτάτω τῶν γενῶν* form part of a Platonic doctrine that is being refuted. Occasionally, however, the term *γένος* alone (where it is not necessarily an abbreviation for *γένος τῶν κατηγοριῶν*) is certainly used to refer to Aristotle's own categories: *De Anima* 402^{a}23, 412^{a}6; perhaps *Post. An.* 96^{b}19. And compare Brentano (1862: 101), who cites parallel texts in n. 93.

[39] The doctrines of the *Topics* that *τὸ ὄν* is not a genus, and that a genus is predicated synonymously of its species (127^{b}6), do not together entail that *τὸ ὄν* is predicated homonymously. But the suggestion is a natural one; and it seems to have been made by others before Aristotle: see below, n. 41.

[40] This continues, but goes beyond, the use of the categories in *Topics* I.15 to show that *good* is homonymous (107^{a}11). The novelty in *Pr. An.* I.37 is that the categories are invoked not only to show that a term is used in different ways (*πλεοναχῶς* at *Topics* 106^{b}30, etc.) but also to specify in just how many ways (*ποσαχῶς*). There is at most a hint of this at *Topics* 106^{a}2–8. (For the distinction between homonymy and "being said in many ways", see note 47 below.)

[41] Perhaps the closest 'earlier' anticipation of the multivocity of *being* is in *Soph. El.* 33: *οἱ δὲ τὸν Ζήνωνος λόγον καὶ Παρμενίδου λύουσι διὰ τὸ πολλαχῶς φάναι τὸ ἓν λέγεσθαι καὶ τὸ ὄν* (182^{b}26) "Some [i.e. other than Aristotle himself?] refute the argument of Zeno and Parmenides by claiming that *one* and *being* are said in many ways." On this see Kapp (1920), p. 252 n. 42, who also cites the *Soph. El.* passages where *ἁπλῶς εἶναι* is distinguished from *εἶναί τι*: 166^{b}22, 166^{b}37–167^{a}20, 168^{b}11–16, 169^{b}10–12, 180^{a}23–^{b}39. Cf. *De Int.* 21^{a}25–33. None of these passages applies the categorial scheme to the multivocity of *εἶναι*.

[42] The expression *γένη τῶν ὄντων* never appears as such, in the plural, but at *De Anima* II.1, 412^{a}6 substance is described as *γένος ἔν τι τῶν ὄντων* (cf. 402^{a}23). The more common phrase is *κατηγορίαι τοῦ ὄντος*: see *Physics* III.1, 200^{b}28; *Gen. Corr.* I.3, 317^{b}6; *Met.* Θ.1, 1045^{b}28. Also note *σχῆμα κατηγορίας τοῦ ὄντος* (*Met.* Δ.28, 1024^{b}13). All of these formulae depend upon the fuller expression *τὸ ὄν λέγεται κατὰ τὰ σχήματα τῶν κατηγοριῶν* (*Met.* 1051^{a}34; cf. 1017^{a}23, 1026^{a}36).

[43] See the discussion of *σημαίνει* above, pp. 255ff.

[44] For this 'canonical rewriting' of all sentences in copula form, see Kahn (1973), 212–17. For the idiomatic use of the present periphrastic in Greek, *ibid.* 134–41. In Greek the simple present tense *βαδίζει* corresponds in use to the English progressive *is walking*, as well as to the simple present *walks*. The Greek periphrastic form generally exploits some stylistic nuance associated with the copula: asseverative, existential, or stative-locative. For an example of the latter compare Plato, *Meno* 84A3 *οὗ ἐστι ἤδη βαδίζων ὅδε* (*τοῦ ἀναμιμνήσκεσθαι*), literally "where he is now in his walking", i.e. how far he has got (in his process of recollection). Aristotle simply ignores the stylistic nuance and treats the two forms as logically equivalent. Indeed, the two expressions represent a single logical structure. That is to say, it makes no difference either to the truth value or to the logical consequences of the assertion whether one says (in Greek) *Socrates walks* or *Socrates is walking:* the latter (*ἔστι βαδίζων*) can be read simply as an emphatic version of the former.

[45] More exactly, the *F*'s are divided by the categorial scheme into eight classes, each of which determines a distinct value for *is*. This assumes that the subject *X* is a particular

substance. If we let *X* range over the categories and choose *F* each time from the same category, we of course get the same eight classes of *F* but the value of *is* apparently remains constant. So this is not the most illuminating point of view from which to understand Aristotle's claim that *being* (or *what is*) is said in all these different ways.

[46] *Cat.* 4, $1^{b}25$ *τῶν κατὰ μηδεμίαν συμπλοκὴν λεγομένων ἕκαστον ἤτοι οὐσίαν σημαίνει ἢ ποσὸν ἢ ποιὸν κτλ.*

[47] I assume that in the contexts so far discussed Aristotle uses the terms *ὁμώνυμα* and *πολλαχῶς λεγόμενα* more or less interchangeably, as for example in *Topics* I.15. (Compare *ποσαχῶς* at $106^{a}2$, *πολλαχῶς* at $106^{a}9$, 11, 14 and 19, but *ὁμώνυμον* at $^{a}21-22$. Similarly we have *πλεοναχῶς* at $106^{b}1$, *ὁμώνυμον* at $^{b}4$ and $^{b}8$, *πλεοναχῶς* again at $^{b}14$, and so throughout.) When we come to *Met.* Γ.2, it is obvious that (*λέγεται*) *πολλαχῶς* is distinguished from *ὁμωνύμως*, since the former is asserted and the latter denied for *τὸ ὄν*. But this is a terminological innovation, implying a special, narrow sense for *ὁμωνύμως*. It is true that the narrow sense was in fact implied by the word *μόνον* in the definition of *Categories* 1, but Aristotle seems rarely to have taken account of this implication in uses 'earlier' than Γ.2.

Once the distinction between multivocity in general (*πολλαχῶς λεγόμενα*) and the special case of merely verbal homonymy (*ὁμώνυμα* in the strictest sense) has been clearly drawn, Aristotle of course applies it systematically in the discussion of focal meaning. Hintikka (1973: 6–7) lists three passages from the *Metaphysics* where the terminology of Gamma 2 is presupposed (Z.4, $1030^{a}29$ff.; Θ.1, $1046^{a}4-7$; K.3, $1060^{b}31$ff.), and one passage elsewhere (*De Gen. et Corr.* I.6, $322^{b}29$ff.) where the same distinction might either be presupposed or just coming into view. The same is true for *Physics* VII.4, $249^{a}21-25$ (cited by Hintikka, 1973: 17f.). In the mature usage represented by *Met.* Γ.2, it seems clear that every case of homonymy is also a case of *πολλαχῶς λεγόμενα*, but not conversely.

[48] This is Ackrill's translation of the first sentence of the *Categories*, slightly adapted. It seems to me redundant to render *λόγος τῆς οὐσίας* as 'definition of being'.

[49] One might object that for every category but substance the common answer might be: for them to 'be' is to be an attribute (*ὑπάρχον*) or accident (*συμβεβηκός*) of substance. But although this answer would be true, it apparently does not count as a proper answer to the *τί ἐστι* question, since no term that applies in more than one category can be predicated univocally across categorial boundaries. The term *accident* thus has the same special, extra-categorial status as *cause, form, matter, potency* and *act.* And of course the term *category* or *predication of being* has this same status, as does the term *being* itself.

[50] For the notion of paronymy, see *Categories* 1. Paronymy is a four-term relation between two things *A* and *B* and the two corresponding words 'A' and 'B' (the 'names' of these things), such that 'A' differs from 'B' by a minor morphological deviation, for example by the change of a suffix, and *B* is in some sense prior to *A* (with reference to these names). In that case *A* is a paronym of (is named from, or has its name taken from) *B*. Thus the grammarian is a paronym of grammar (or, in the formal mode, 'grammarian' is a paronym of 'grammar'), and the brave man is a paronym of bravery. In this sense, all beings· (*ὄντα*) are paronyms of entity or substance (*οὐσίαι*). But this linguistic relationship of paronymy is not at all the same thing as focal meaning: *πρὸς ἕν λέγεσθαι*, as some earlier commentators assumed. For the linguistic relation between *ὄντα* and *οὐσία*, or between both and *εἶναι*, would be exactly the same even if all beings so

designated had only the name (i.e. cognate names) in common. In other words, paronymy is compatible with sheer homonymy, since it does not require that *A* and *B* share anything beyond a cognate name. Compare Ackrill (1963), 72f.

[51] The interpretation of the contrast between 'being per accidens' and 'being per se' in *Met.* Δ.7, 1017^{a}–22 is extremely difficult, and it is rare to find two commentators who agree here. As Kapp (1920: 224n) says, the terms κατὰ συμβεβηκός and καθ' αὑτό notoriously belong to those whose meaning in Aristotle can only be established by the context; but in this case the context is not very helpful. I persist in the view (shared by Kapp and in effect by Gillespie too) that the clue is to be found in *Post. An.* I.22, where κατὰ συμβεβηκὸς κατηγορεῖν is opposed to κατηγορεῖν ἁπλῶς as random predication (without regard to the logical status of subject and predicate) to predication in canonical form, according to the scheme of the categories, with substance as the subject of discourse. For a recent discussion of the problem see J. W. Thorp (1974) who believes the solution just proposed is untenable in view of the fact that two of Aristotle's examples of being per accidens are in the proper form: *a man is musical* (1017^{a}9, 14). In both cases, however, this proper form is treated as equivalent to its converse: *the musical (one) is a man*, that is to say, the essential distinction is disregarded. From the point of view of extension, and hence of example, predication in good form is of course a special case of random predication.

If, as I suggest, καθ' αὐτὰ εἶναι here is to be understood by reference to κατηγορεῖσθαι ἁπλῶς in *Post. An.* I.22, then the meaning is: things are said to be per se in as many ways as attributes are predicated of subjects, that is, in the various ways distinguished by the scheme of categories (with a substance as subject of predication). Seven of these eight ways will of course be εἶναι κατὰ συμβεβηκός in terms of another contrast, in which only substance is ὂν καθ' αὑτό; see e.g. *Met.* Z.1, 1028^{a}20–31.

[52] In the second clause, (beginning ὁσαχῶς at 1017^{a}23) the subject of λέγεται is the categories or the categorial items, whereas the subject of σημαίνει is the term εἶναι. The verb σημαίνει thus covers both the denotation of all categorial items by the verb *to be* and the eight connotations or 'ways' of denoting which are here distinguished (τοσαυταχῶς). The same is true for σημαίνει in the preceding clause (1017^{a}23), where (*pace* Kirwan) the subject of the verb is the categories (τὰ σχήματα τῆς κατηγορίας).

[53] There can be, no more than for σημαίνει, no single adequate translation for τὸ ὂν λέγεται πολλαχῶς 'being is said in many ways'. This means (a) that the term *being* applies to many diverse things, where the diversity can be spelled out by a distinct λόγος for each class of applications. But it also means (b) that things are said to be in various ways, i.e. are said to have various modes of being according to the same diversity. We can combine these formal and material modes in a mixed rendering like "What is, i.e. the things that are, are said to have being and are called *beings* ...". Nothing less than the mixed rendering can do justice to the complex view that Aristotle is expressing.

[54] See Ross (1924) I, lxxxv, who quotes with approval the view of Bonitz that the categories are "essentially a classification of realities". Bonitz (1853: 10) himself said: "Das gesammte Bereich des Gedachten oder des Seienden ... wird in zehn oberste Classen eingeteilt, deren einer ein jeder Gegenstand unserer Vorstellung oder erfahrungsmässigen Auffassung anheimfallen muss." Similarly Zeller (1879), pp. 258ff. More recently De Rijk (1952: 76) has claimed that the doctrine of the categories "was, in its first stage (i.e. in the *Categories*), a rough division of beings".

[55] For the term 'focal meaning' and for the importance of this concept in permitting Aristotle to recognize the possibility of a general metaphysics, see Owen (1960). He

points out (p. 166) that the assertion in *Eudemian Ethics* I.8, 1217^{b}34–35 that there is no one science of being (*τὸ ὄν*) represents an extreme consequence of the homonymy of *being*, against which Aristotle himself is reacting in *Met.* Γ.2 and Z.1 with his doctrine of focal meaning.

[56] Thus the analysis of *necessary* in Δ.5 ends with the characterization of absolute or unqualified necessity as *τὸ πρῶτον καί κυρίως ἀναγκαῖον* 'what is primary necessity and strictly so called' (1015^{b}11). Even more revealing for the emergence of focal meaning is the remark on *φύσις* 'nature' in Δ.4, 1015^{a}13–19, where the other notions of nature are shown to be derived from, or dependent on, *ἡ πρώτη φύσις καὶ κυρίως λεγομένη* 'the primary and strictest case of nature', which is the form or essenee (*οὐσία*) of "things possessing a principle of motion in themselves, per se [or in virtue of what they are]". Compare the "primary and strictest" case of *πρότερον* 'prior' at *Cat.* 12, 14^{a}26. In general, the Postpredicamenta (*Categories* 10–15) represent an early study in *πολλαχῶς λεγόμενα*, a kind of incipient version of *Metaphysics* Delta.

[57] Compare Hintikka (1973), 14f. and Aubenque (1962), pp. 190–198.

[58] Reading *οὐδὲν γὰρ αὐτῶν ἐστὶν οὔτε καθ' αὐτὸ πεφυκὸς οὔτε χωρίζεσθαι δυνατὸν τῆς οὐσίας* at 1028^{a}22–24, with Ross and other editors. Jaeger (in the Oxford Classical Text) brackets *πεφυκός*.

[59] For the 'veridical' nuance of *τὸ ὄν* in Greek, see Kahn (1973), 331–70; for the importance of this for understanding the Greek view of Being, see Kahn (1966).

[60] I take *τὸ τί ἦν εἶναι* to be an ordinary articular infinitive, construed on the pattern of *τὸ ἀνθρώπῳ εἶναι* 'the being for a man', 'the being which belongs to man', with the dative noun replaced by the *τί ἐστι* question cast in the philosophical imperfect (to suggest that it has already been answered): 'the being [for *x*] as determined by its definition, by what we have formulated in answer to the question *what is it?*' The original or literal sense of the expression is 'its being what-it-is', or more fully: 'the being or existence of the thing (which may be specified in the dative) as determined by its specific form or essence, the latter being identified in the definition, in answer to the question *'what is it?'*. Thus there is or could be a clear difference in principle between the more existential formula *τὸ τί ἦν εἶναι* which refers (or at least might refer) to the complete being of the thing in question, its existence as determined by its essence, and the more strictly essential *τὸ τί ἐστι*, which refers to the form alone, as specified in the definition. In practice, however, Aristotle rarely if ever attends to this difference, and, for a variety of reasons (including the subordinate place of existential nuances in his conception of *εἶναι*, and also because of other uses for *τὸ τί ἐστι*, as a designation for the first category and for essential predication in general) he regularly employs *τὸ τί ἦν εἶναι* simply as a frozen formula for definitional form or essence (e.g. *Met.* Z.4, 1030^{a}6; and even in an 'early' text like *Topics* I.5). Thus he can conclude that it is "essence without matter" *οὐσία ἄνευ ὕλης* (Z.7, 1032^{b}14); and the psyche can be defined as the *τὸ τί ἦν εἶναι* of the body (*De Anima* II.1, 412^{b}11). The fuller, existential connotations of *τό τινι εἶναι* have simply disappeared, and one may doubt that they were ever of any real importance for Aristotle. (On the other hand, he is not completely oblivious to the existential implications or presuppositions of the verb even in the purely definitional formula *τὸ τί ἐστι*, as his remarks at *Post. An.* II.7, 92^{b}4–11 make clear. Note that the expression there for "the existence of man" is *τὸ εἶναι ἄνθρωπον*, not *τὸ εἶναι ἀνθρώπῳ*. And see further Owen, 1965, 2.)

The same conclusions follow from the more common reading of this formula (following Bonitz) as a kind of abbreviation for *τὸ τί ἦν (τὸ) ἐκείνῳ εἶναι* "what it was for

that thing to be". On philosophical grounds, this reading may be slightly more illuminating. (But it too must confront the fact that the *psyche* is scarcely "what we have defined as the being of a living body", if "being" is understood in a natural way to include the material existence of an extended body. On any reading, this fuller sense of εἶναι has been lost sight of in the technical usage of τὸ εἶναι.). But this common reading seems to be grammatically dubious and historically implausible. No explanation is forthcoming for the systematic omission of the second τό, which this view presupposes. (See Bassenge, 1960, esp. pp. 19–25.) And since on this view τί ἦν ceases to be a natural transformation of the τὸ τί ἐστι formula (where the subject of the question is normally represented by a noun or nominalized adjective, not by an infinitival construction), the frequent equivalence of the two expressions for essence becomes difficult to understand. Bassenge's study (1960) seems to come to the correct conclusion, though by a rather circuitous route. See Hick's commentary on *De Anima* 412^{b}11 for a briefer statement of the grammatically correct interpretation.

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